

L 9051-65

ACCESSION NR: AP4044955

methods. The luminescence and absorption spectra were obtained at 4.2 and 77K using DFS-13 and DFS-8 spectrographs and the IKS-12 spectrometer. The EPR study established the symmetry of the surrounding of the  $\text{Er}^{3+}$  ions in these crystals. Two types of crystals were grown, one in a fluoriding atmosphere at a pressure which did not ensure complete removal of the oxygen impurities, and one at a pressure high enough to eliminate the oxygen. The erbium concentration in the crystals was ~0.1%. The EPR data show that there are at least four essentially different types of  $\text{Er}^{3+}$  centers, having different surrounding symmetries and different crystalline field strengths. The EPR method makes it possible to study all these ions separately. On the other hand, the optical spectra yielded lines corresponding to all possible symmetries of the surrounding of the  $\text{Er}^{3+}$  ions in the spectra. To relate the two methods, the spin-lattice relaxation of the  $\text{Er}^{3+}$  ions in the  $\text{CaF}_2$  was measured at 2—45K, and the distances to the nearest excited Stark components of the lower level of these ions were determined. These data were

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used in the analysis of the optical spectra. In addition, a theoretical interpretation of the level splitting in the crystalline field is presented (in the cubic-field approximation) for  $\text{Er}^{3+}$  ions in a tetragonal surrounding. "The authors are grateful to A. M. Prokhorov for interest and to V. V. Osiko for valuable discussions." Orig. art. has: 6 figures, 3 formulas, and 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 18Apr64

ATD PRESS: 3110

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OTHER: 014

Card

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SUMBAYEV, G.I.; ALEKSEYEV, V.L.; KAMINKER, D.M.; SMIRNOV, A.I.; SHABUROV, V.A.

Study of the excited states of Rh<sup>104</sup>,<sup>104\*</sup> based on gamma radiation  
from the (nγ)<sup>0</sup>-reaction. Izv. AN SSSR. Ser. fiz. 29 no.5:739-759 My  
'65. (MIRA 18:5)

BONDARENKO, Ye.M., inzh.; SMIRNOV, A.I., inzh.; DOROFEEV, B.G., kand.  
tekhn. nauk

Investigation of thermal and aerodynamic parameters of resistor  
blocks made from a tape-wound high-resistance alloy. Elektro-  
tekhnika 36 no.5:27-30 My '65. (MIRA 18:5)

SMIRNOV, A. I.

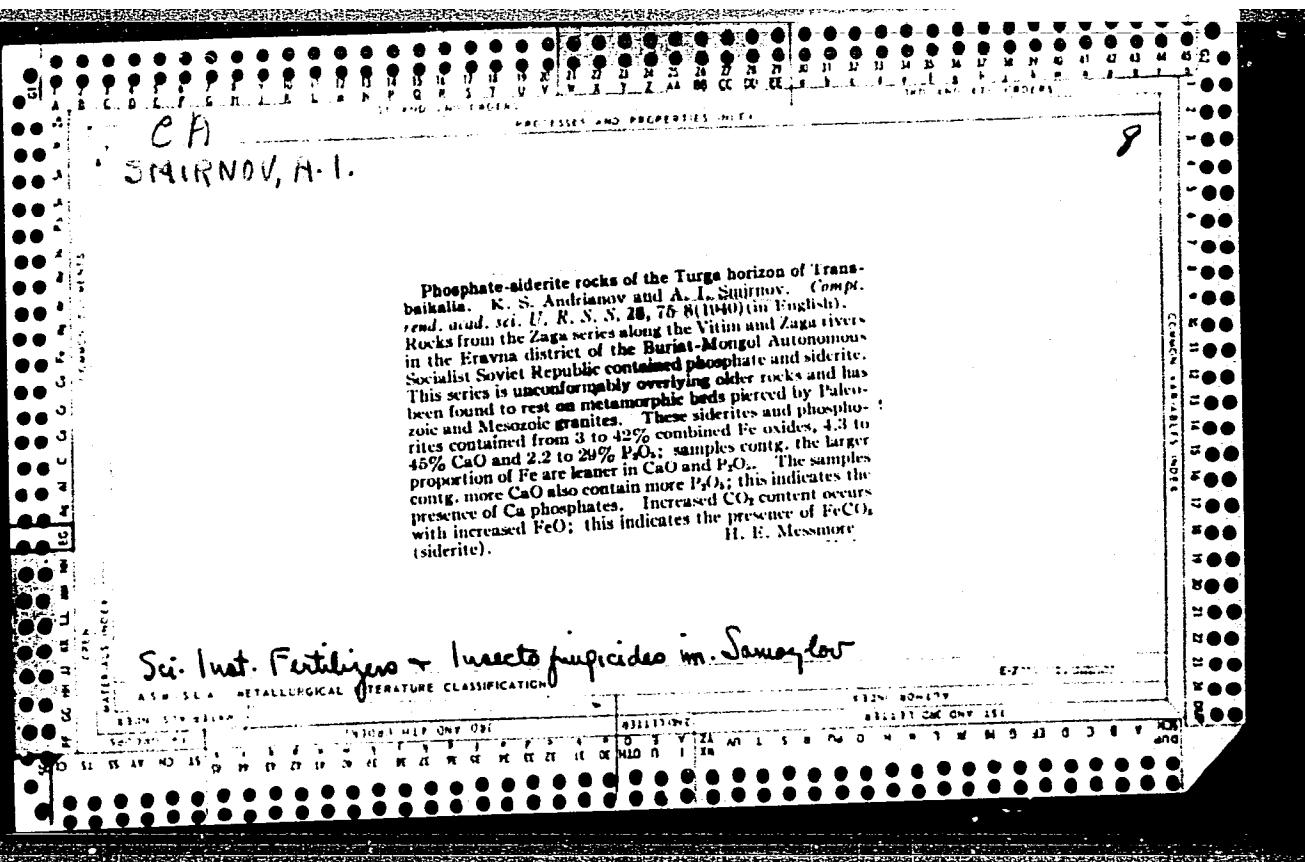
Enisei i Angara kak put' v Jakutskiu ASSR. Xenisei and Angara as the waterway into Yakut ASSR. (Ze industrializatsii Sovetskogo Vostoka, 1932, no.1).

DLC: H8.S4 Slav.

Verkhniy Enisei, kak torgovyi put' v Mongoliu i Tannu-Tuvu. Upper Xenisei, as a trade route into Mongolia and Tannu-Tuva. (Sovetskaia Azia, 1931, no. 3-4, p. 153-163).  
DLC: H8.S4 Slav.

Vodnyi put' v Tannu-Tuvu i Mongoliu. The waterway into Tannu-Tava and Mongolia. (Zhizn' Sibiri, 1930, no. 11-12, p. 158-65). DLC: HC483.Z5

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.



Smirnov, A.I.

2  
14E30

Precambrian phosphorites of the Kalsel crest. A. I. Smirnov. Trudy Gidrograf. Nauch.-Issledovatel. Inst. Gidro-Avtom. SSSR, 1955, No. 2, 98-120; Referat. Zhur., Khim. 1956, Abstr. No. 12677. Two phosphorite-concretions were first discovered for the Precambrian "Sukhot Khrebet" ( $R_1^{(1)}$ ) and Uderetskaya ( $R_1^{(2)}$ ). The first quartz-like sandstones contain interlayers of hetero-grained sandstone and concretions of sandy phosphorite. The 2nd is composed of clay shales with interlayers of phosphate-siderites. According to the results of chem. analyses, confirmed by microscopic investigations, the amt. of  $P_2O_5$  in concretions is up to 22.65% and in siderites, 9.90%. Special attention is paid to the paragenesis of siderite and phosphorite, a phenomenon impossible under Meso-Cenozoic conditions. It is also noticed that if calcite is absent in the enclosing rock, it is absent as well in the phosphate material.

J. Młoszewska //

N5

~~Smirnov~~, Smirkova, AI

✓ Ordovician phosphorites from the Sileian plateau.  
N. A. Krashnikova and A. I. Smirnov. *Tretye Gوردары.*  
*Nauch.-Issledovatel. Inst. Горн.-Хим. Стр.» 1955, No. 2,*  
127-41; *Referat. Zhur. Khim.* 1956, Abstr. No. 12576.—  
The following types of phosphorites are found in sandy-aluminous deposits of Meso-Ordovician formation: abundant phosphatized remains of fauna (shells, shell nuclei, coprolites), phosphate grains, phosphorite concretions, and lenses of sandstone with phosphate cement. Small shells of brachiopods, almost entirely filled with Ca phosphate, have the highest  $P_2O_5$  content (32.19%). Concretions of aluminous phosphorite contain 27.80%  $P_2O_5$  and sandstone phosphate cement lenses—0.86%  $P_2O_5$ . The amt. of F in different samples varies from 0.64 to 2.50%. In the sept. phosphate material the amt. of  $P_2O_5$  found is 29.63–37.08%, CaO 42.36–53.88% and F up to 3.00%; thus the phosphate material has a compn. similar to that of fluorapatite. The largest concns. of phosphorites are found in portions of intermixed rocks: sandstones, aleurolites, clay shales, conglomerates; portions of homogeneous rocks are poor in P. Especially rich in  $P_2O_5$  are interformational conglomerates. With the phosphorite are assoc. homogeneous calcite, glauconite, Fe-bearing oölitcs, and other minerals.

J. Mlozewska

4-HE3  
1-HE2C

AUTHOR:

Smirnov, A.I.

SOV-132-58-9-16/18

TITLE:

The Geologists and Prospectors of Uzbekistan are Bringing the Decision of the May Plenary Session of the Central Committee of the Communist Party to Life (Geolog i razvedchiki Uzbekistana prevoryayut v zhizn' resheniye Mayskogo plenuma TsK KPSS)

PERIODICAL:

Razvedka i okhrana nedr, 1958, Nr 9, pp 57-58 (USSR)

ABSTRACT:

The second plenary session of the Committee of the Trade Union of geological workers of Uzbekistan was convened in July 1958. In connection with the decision of the Central Committee of the Communist Party to speed up the development of the chemical industry and the production of synthetic materials, the session discussed the situation and the outlook for this industry in Uzbekistan. The Chairman of the Committee K.M. Zamanov, the head of the Central Administration of Geology and Conservation of Mineral Resources of UzbekSSR Kh.T. Tulyaganov, the head geologist of the Uzbek Geophysical Trust B.B. Tal'virskiy, the head geologist of the Uzbekneftegazrazvedka Trust Zhukovskiy, and the Director of the Uzgeologorazvedka Trust N.S. Ismagilov reported on successful prospecting operations in the republic which led to the dis-

Card 1/2

SOV-132-58-9-16/18

The Geologists and Prospectors of Uzbekistan are Bringing the Decision of the May Plenary Session of the Central Committee of the Communist Party to Life

covery of huge deposits of natural gas in the vicinity of Bukhara. New prospective oil and gas bearing regions were also discovered. Huge deposits of common salt and limestones situated near these regions create favorable conditions for the development of chemical plants in the near future.

ASSOCIATION: TsK Profsoyuza rabochikh geologorazvedochnykh rabot (Central Committee of the Trade Union of Geological Workers)

1. Geology--USSR

Card 2/2

AUTHOR:

Smirnov, A.I.

SOV/132-59-1-18/18

TITLE:

A Seminar for the Chairmen of the Trade Union Committee  
(Seminar predsedateley komitetov profsoyuza)

PERIODICAL:

Razvedka i okhrana nedr, 1959, Nr 1, pp 62-64 (USSR)

ABSTRACT:

This seminar-conference was called by the Presidium of the TSK profsoyuza rabochikh geologorazvedochnykh rabot (Central Committee of the Trade Union of the Geological Prospecting Workers) and took place in Sverdlovsk in October 1958. Its aim was to exchange experience in professional work.

Card 1/1

USCOMM-DC 60.734

SOV/132-59-3-12/15

AUTHORS: Smirnov, A.I., and Kubik, N.M.

TITLE: The Zyryanovskiy Prospecting Committee Puts Into Action the Decisions of the Communist Party

PERIODICAL: Razvedka i khrama nedr, 1959, Nr 3, pp 51-54, (USSR)

ABSTRACT: The article deals with the trade-union aspects of the Zyryanskaya Geological and Prospecting Expedition in Kazakhstan, noted for its discovery of the Zyryanovskoye poly-metallic ore deposit. Its chief is S.M. Groznykh and its chief geologist - I.K. Neklyudov. Among the innovations, the following new techniques are employed or being introduced there: 1) the so called "directed" drilling to fight drilling errors with regard to both azimuth and zenith; 2) testing coreless drilling of soft rocks (hardness up to Class IV) deposited above the ore stratum, with highly effective drilling results achieved due to milling cutters; 3) shot is fed into the well hole in small dosages by a new shot feeding machine of the D-3-type to fight oblique drilling; 4) a new method to drill hard rocks by using a

Card 1/2

SOV/132-59-3-12/15

The Zyryanovskiy Prospecting Committee Puts Into Action the Decisions of the Communist Party

combination of shch and "sechka" (steel fragments cut to small pieces like chopped straw) is being developed. The expedition, among others, employs a ZIF-1200A-type drill rig and a mechanism of the FO-47A-type for screwing together and unscrewing the pipes. In matters of competition, the Leninogorskaya geologorazvedochnaya ekspeditsiya (Leninogorsk Geological and Prospecting Expedition) and BRIZ are mentioned.

ASSOCIATIONS TsK profsoyuza rabochikh geologorazvedchikov rabot (Central Committee of the Trade-Union of Geological and Prospecting Workers), Zyryanovskaya geologorazvedochnaya ekspeditsiya (Zyryanovskaya Geological and Prospecting Expedition).

Card 2/2

SMIRNOV, A. I.

Reports and elections of trade union of workers is an important  
political campaign. Razved.i okh.nedr 25 no.11:58-59  
(MIRA 13:5)  
N '59.

1. TSentral'nyy komitet profsoyuza rabochikh geologorazvedo-  
chnykh rabot.  
(Prospecting)

3(0), 5(0)

AUTHOR:

Smirnov, A. I.

SOV/20..125..1-48/67

TITLE:

New Data Concerning the Elementary Composition of the  
Phosphorites of the Karatau Basin (Novyye dannyye po  
elementarnomu sostavu fosforitov basseyna Karatau)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 1,  
pp 177-180 (USSR)

ABSTRACT:

By utilizing new geologic data on the Dzany-Tas, Aksay,  
and Chulaktau occurrences (Refs 1, 2) the question of the  
average element composition of the phosphorites mentioned  
in the title could be approached, the influence of erosion  
on this composition could be precisely determined, and  
the relation of the various elements to the chief rock  
forming minerals of the phosphorites could be explained.  
Figure 1 summarizes this content and compares it with the  
average content in sedimentary rocks (Ref 3). From this  
it is apparent that the content of the chief mass of  
elements in phosphorites is sharply reduced. Since the  
major mass of the sediments consist of clay and clay-shale  
(Ref 4) Al is the characteristic element of them. In  
phosphorites the Al-content amounts to 1/15 of that in

Card 1/4

New Data Concerning the Elementary Composition of the SOV/20-125-1-48/67  
Phosphorites of the Karatau Basin

sedimentary rocks. K, Na, Ti, N, Cr, Ni, V, Cu, Ga are in approximately similar ratios. The content of Zr, Nb, Sc, Hf, Ta, Sb, and Bi may be somewhat slighter. Consequently a relative small number of elements are concentrated in the phosphorites. To these belong those which form phosphate, the most important rock forming mineral, i. e. P. F and Ca; also, trace elements which are present as isomorphous admixtures of the primary phosphate: Sr, La, Y, Ce, Co, Pb, As, U, Mo and Ag. Others can be concentrated in phosphorites as a result of secondary process: B and Be, C, Mg, Si, Fe and S, as well as O, Ba, Mn, Cl, Li and Sn occur mostly in a quantity which corresponds or is somewhat below that of the sediments. Figure 2 shows the general conformities of trace element occurrence in phosphorites. There is no great difference between individual occurrences; the content fluctuates mostly around the 2-3 fold. It is apparent from figure 3 that as a result of erosion of phosphorite, Mg, Ni, Co, Li, C, Cr, Ga and Sr quantitatively decrease while Al, Si, P and F increase, and V, B, Zn, Ba, Mo, Be, Ti, Pb and Ag increase rapidly.

Card 2/4

New Data Concerning the Elementary Composition of the SOV/20-125-1-48/67  
Phosphorites of the Karatau Basin

Figure 4 shows the relative element composition (in comparison with natural phosphates) of various fractions of rock forming minerals, enriched 50 - 95 % by phosphate, chalcedony, and carbonate. From this it is seen that La, Ag, Sr, Be, Pb, Y, Mn and S become concentrated in the phosphate; further, that V, Ti, Mo, Li, Ga, Ni, Co and Cr are bound to chalcedony and other acid soluble minerals, while Ba alone has a close connection with carbonates. From the above it is apparent that the composition in question has originated as a result of true specific precipitation processes from sea water. Precipitated were: phosphate, siliceous earth, and carbonate; silicate material, however, only to a quite restricted degree. Metamorphism has scarcely altered the composition. The phosphorites described here can be viewed neither as a biochemical nor as an effusive sedimentary formation. The existence of trace elements speaks in favor of a predominant role of chemical sedimentation processes in a background of an average element composition of sea water. There are 4 figures and 13 Soviet references.

Card 3/4

New Data Concerning the Elementary Composition of the SOV/20-125-1-48/67  
Phosphorites of the Karatau Basin

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut  
gornokhimicheskogo syr'ya (State Scientific Research  
Institute of Chemical Raw Materials Obtained by Mining)

PRESENTED: November 13, 1958, by N. M. Strakhov, Academician

SUBMITTED: October 15, 1958

Card 4/4

SMIRNOV, A.I.

Fifth Plenum of the Central Committee of the Trade Union. Razved.  
i okh. nedr 26 no.4:56-58 Ap '60. (MIRA 15:7)

1. Tsentral'nyy komitet professional'nogo soyuza rabochikh  
geologorazvedochnykh rabot.  
(Prospecting) (Trade unions)

KRIVENKO, Ye.S.; SMIRNOV, A.I.

Second Plenum of the Central Committee of the Trade Union of  
Workers Employed in Geological Prospecting. Razved. i okhr. nedr.  
26 no.11:50-54 N '60. (MIRA 13:12)

1. Redaktsiya zhurnala "Razvedka i okhrana nedr" (for Krivenko).
2. TSentral'nyy komitet profsoyuza rabochikh geologorazvedochnykh  
rabot (for Smirnov).

(Prospecting)

KRIVENKO, Ye.S.; SMIRNOV, A.I.

Second Plenum of the Central Committee of the Trade Union of  
Workers of the Geological Prospecting Organizations. Razved.  
i okh. nedr 27 no.4:50-53 Ap '61. (MIRA 14:5)

1. Redaktsiya zhurnala "Razvedka i okrana nedr" (for Krivenko).
2. TSentral'nyy komitet profsoyuza rabochikh geologorazvedochnykh  
rabot (for Smirnov).  
(Prospecting) (Hours of labor)

SMIRNOV, A.I.

In the Central Committee of the Trade Union of Prospecting Workers.  
Razved.i okh.nedr 28 no.1:59-61 Ja '62. (MIRA 15:3)

1. TSentral'nyy komitet profsoyuza rabochikh geologorazvedochnykh  
rabot.  
(Prospecting) (Trade unions--Congresses)

SMIRNOV, A.I.

Prospectors pass judgement on the activity of the central committee  
of their trade union. Razved.i okh.nedr 28 no.3:50-51 Mr '62.  
(MIRA 15:4)

1. TSentral'nyy komitet profsoyuza rabochikh geologorazvedochnykh  
rabot.

(Trade unions) (Prospecting)

SMIRNOV, A.I.

Second Plenum of the Central Committee of the Trade Union of  
Prospecting Workers. Razved. i okh. nedr 28 no.9:61-63 S  
'62. (MIRA 15:9)

1. TSentral'nyy komitet professional'nogo soyuza rabochikh  
geologorazvedochnykh rabot.  
(Prospecting) (Trade unions)

SMIRNOV, A.I.; TUSHINA, A.M.

Composition and genesis of phosphorites in the Ak-Say deposit.  
Trudy GIGKHS no.7:41-71 '62. (MIRA 16'5)  
(Kara-Tau region—Phosphorites)

SMIRNOV, A.I.

Genesis of Kara-Tau type phosphorites. Trudy GIGKIS no.7:132-138  
'62. (MIRA 16:5)  
(Kara-Tau region--Phosphorites)

KRASIL'NIKOVA, M.A.; SMIRNOV, A.I.

Prospects for finding phosphorites in Ancient Paleozoic deposits of  
the Siberian Platform. Trudy GIGKHS no.7:215-265 '62.  
(MIRA 16:5)  
(Siberian Platform--Phosphorites)

SMIRNOV, A.I.; SHMEL'KOVA, Yu.F.

Phosphorites of the Belousinskoye deposit (Kuznetsk Ala-Tau).  
Trudy GIGKHS no.7:265-280 '62. (MIRA 16:5)  
(Kuznetsk Ala-Tau—Phosphorites)

SMIRNOV, A.I.; IVNITSKAYA, R.B.; ZALAVINA, T.P.

Experimental data on the possibility of the chemical precipitation of  
phosphates from sea water. Trudy GIGKHS no.7:289-302 '62.  
(MIRA 16:5)

(Phosphate)

(Sea water)

KRIVENKO, Ye.S.; SMIRNOV, A.I.

Fourth Plenum of the Central Committee of the Trade Union of Geological Prospecting Workers. Razved. i okhr. nedr 27 no.8: 55-59 Ag '61. (MIRA 16:7)

1. Redaktsiya zhurnala "Razvedka i okhrana nedr" (for Krivenko).
2. TSentral'nyy komitet professional'nogo soyuza rabochikh geologorazvedochnykh rabot (for Smirnov).  
(Prospecting—Congresses)

GIMMEL'FARB, B.M.; TUSHINA, A.M.; SMIRNOV, A.I.; MAYMISTOVA, R.I.

Geology and ore types in the Dzhany-Tas phosphorite deposit.  
Trudy GIGKHS no.7:71-131 '62. (MFA 16:5)  
(Kara-Tau region--Phosphorites) (Kara-Tau region--Ore deposits)

SMIRNOV, A.I.

In the Central Committee of the Trade Union of Workers Employed  
in Geological Prospecting. Razved. i okh. nedr 29 no.11:56-58  
N '63. (MIRA 17:12)

1. TSentral'nyy komitet professional'nogo soyuza rabochikh geolo-  
gorazvedochnykh rabot.

SMIRNOV, A.I.

State Geological Committee of the U.S.S.R. and the  
Central Committee of the Trade Union of the Workers of  
Geological Prospecting. Razved. i okh. nedr 31 no.7:63  
J1 '65. (MIRA 18:11)

1. TSentral'nyy komitet professional'nogo soyuza rabochikh  
geologorazvedochnykh rabot.

SHCHERBUKHA, A. Ya.; SMIRNOV, A.I.

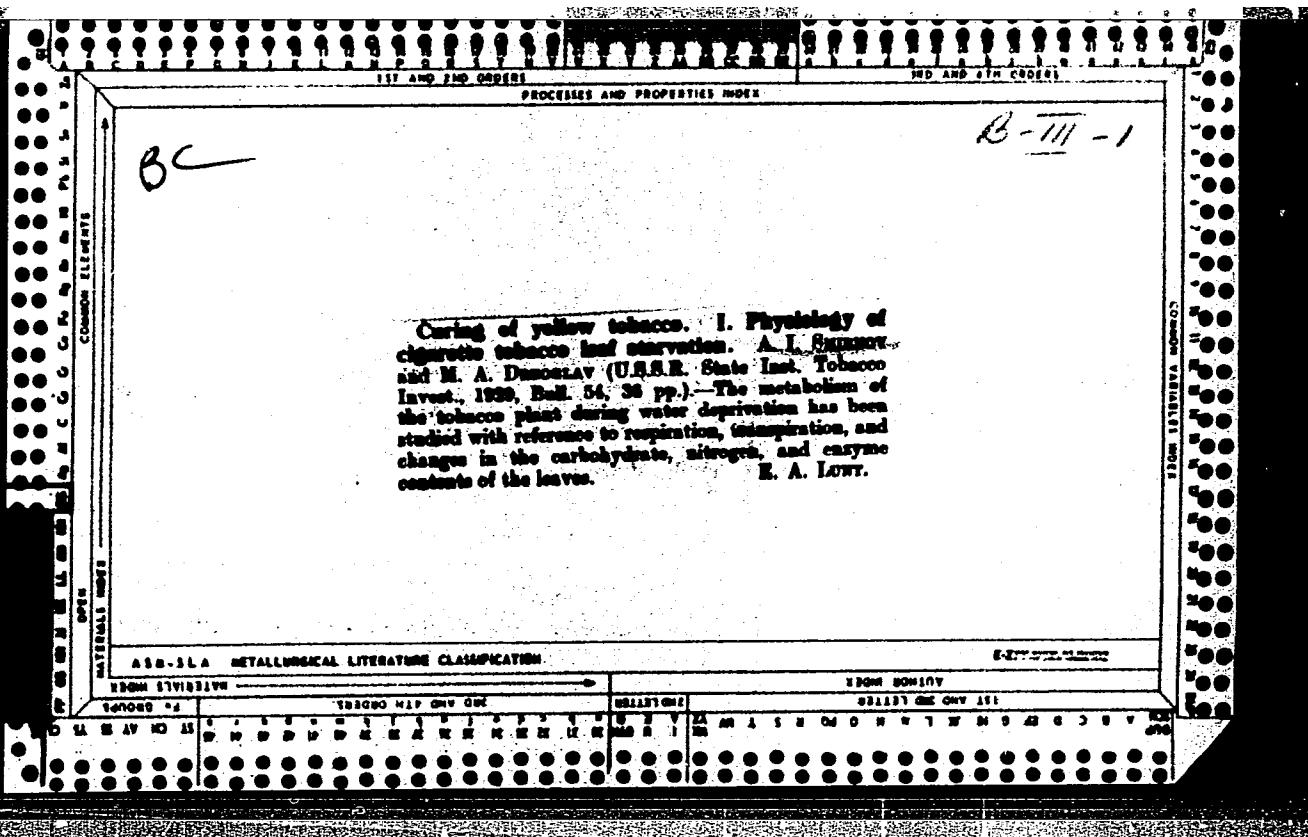
Comparative characteristics of bream in lower Southern Bug and  
Dnieper Rivers. Gidrobiol. zhur. 1 no. 6:43-49 165  
(MIRA 19sl)

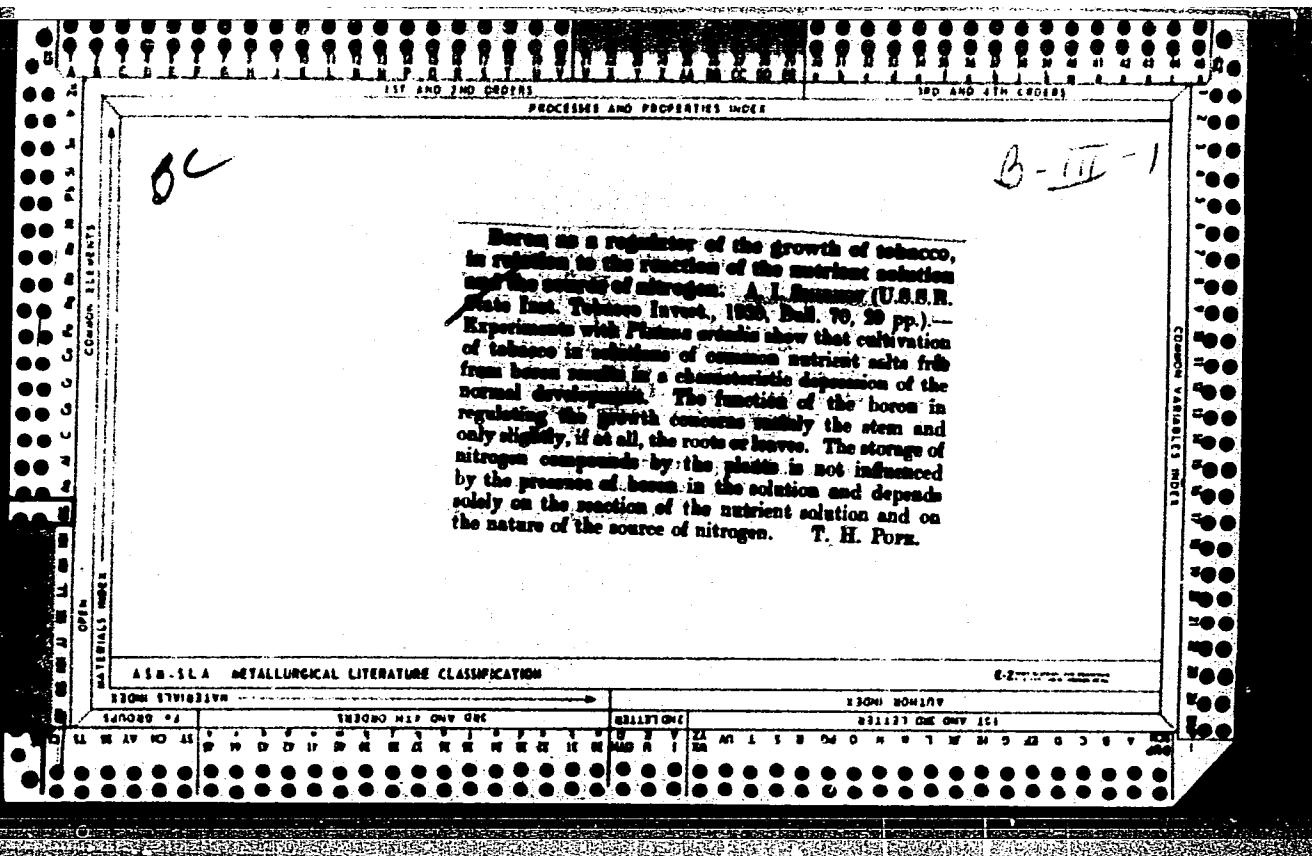
1. Institut gidrobiologii AN UkrSSR, Kiyev,

PAVLOV, P.I.; SMIRNOV, A.I.

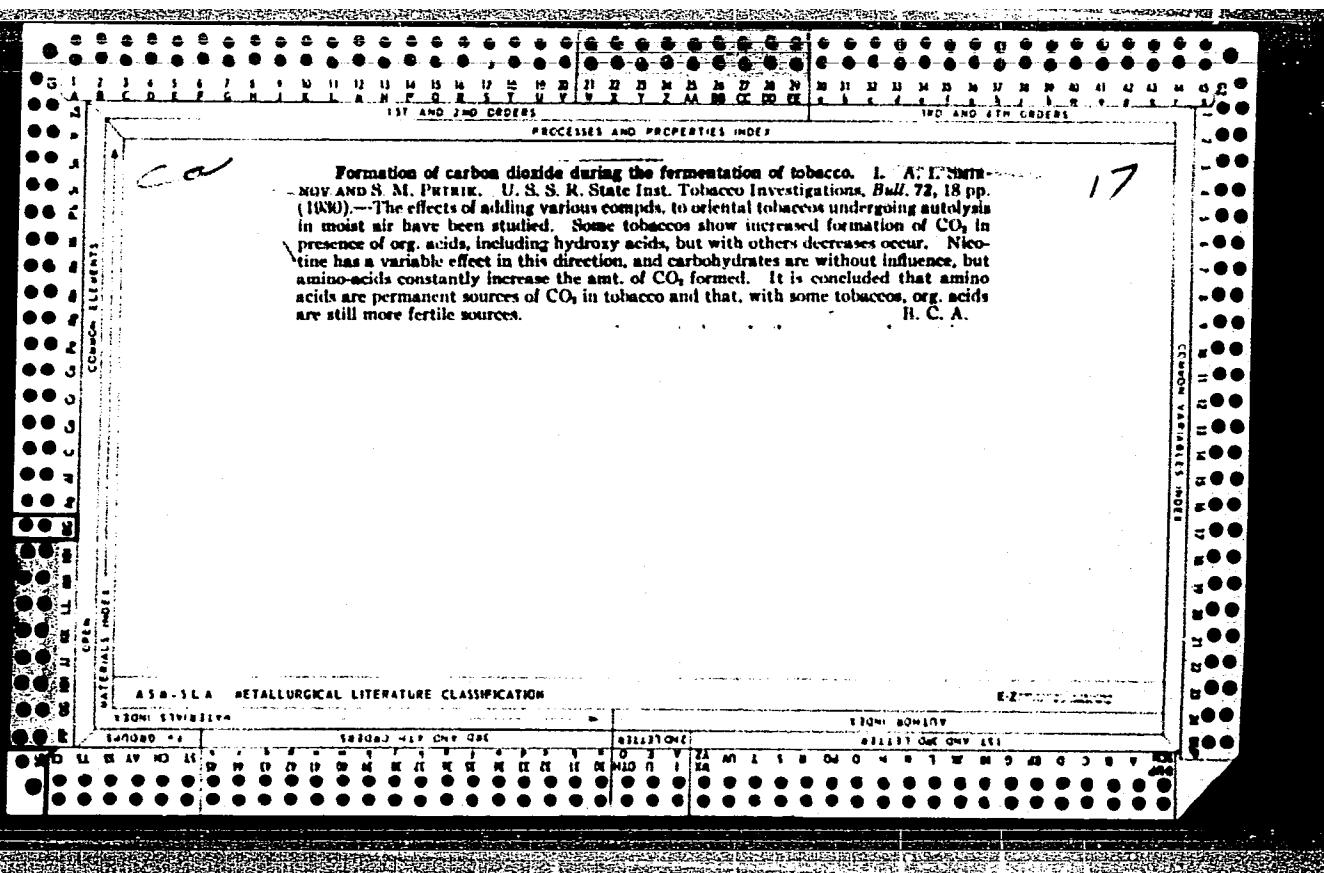
*Leucaspis delineatus* (Heckel) in the basin of the middle  
Dnieper River. Zool. zhur. 44 no.10:1574-1577 '65.

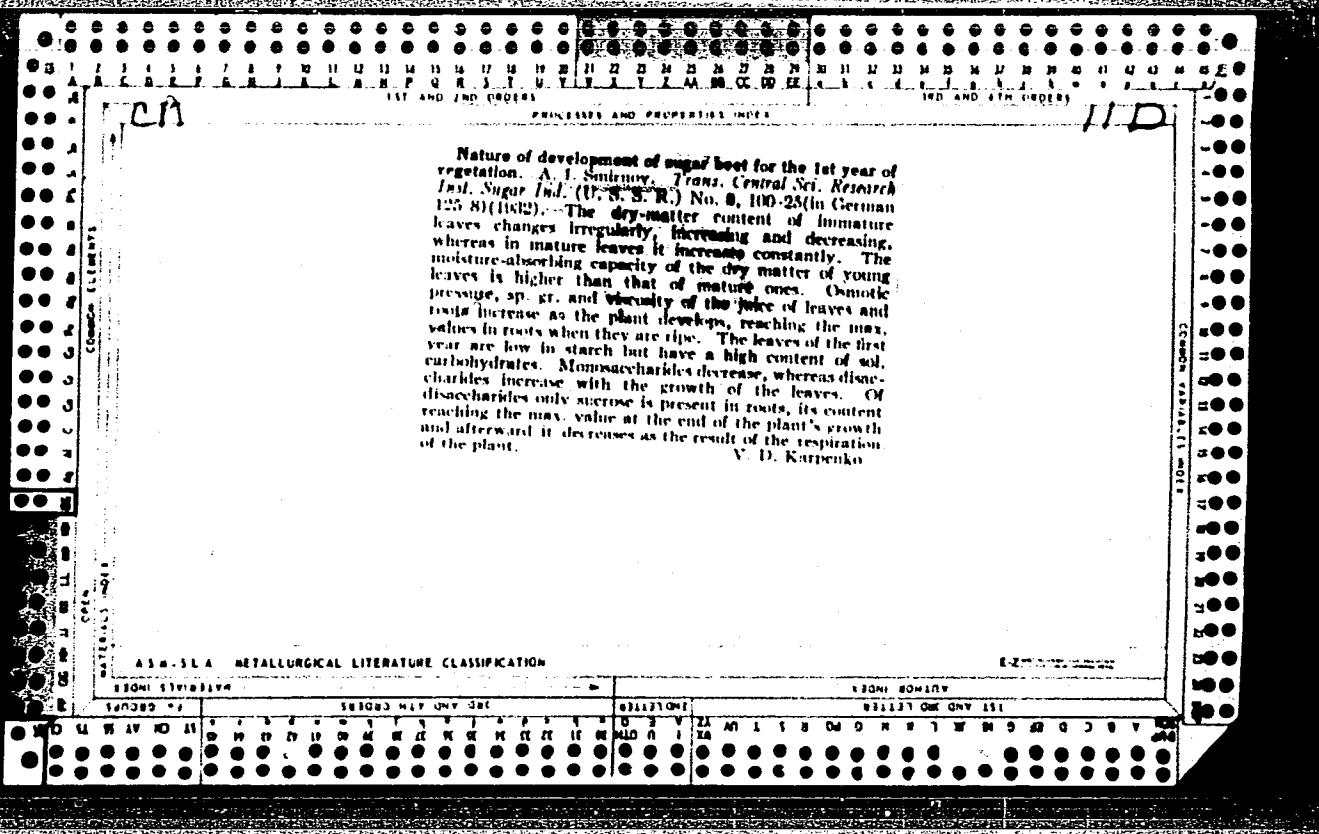
1. Institut gidrobiologii AN UkrSSR, Kiyev. (MIRA 18:11)

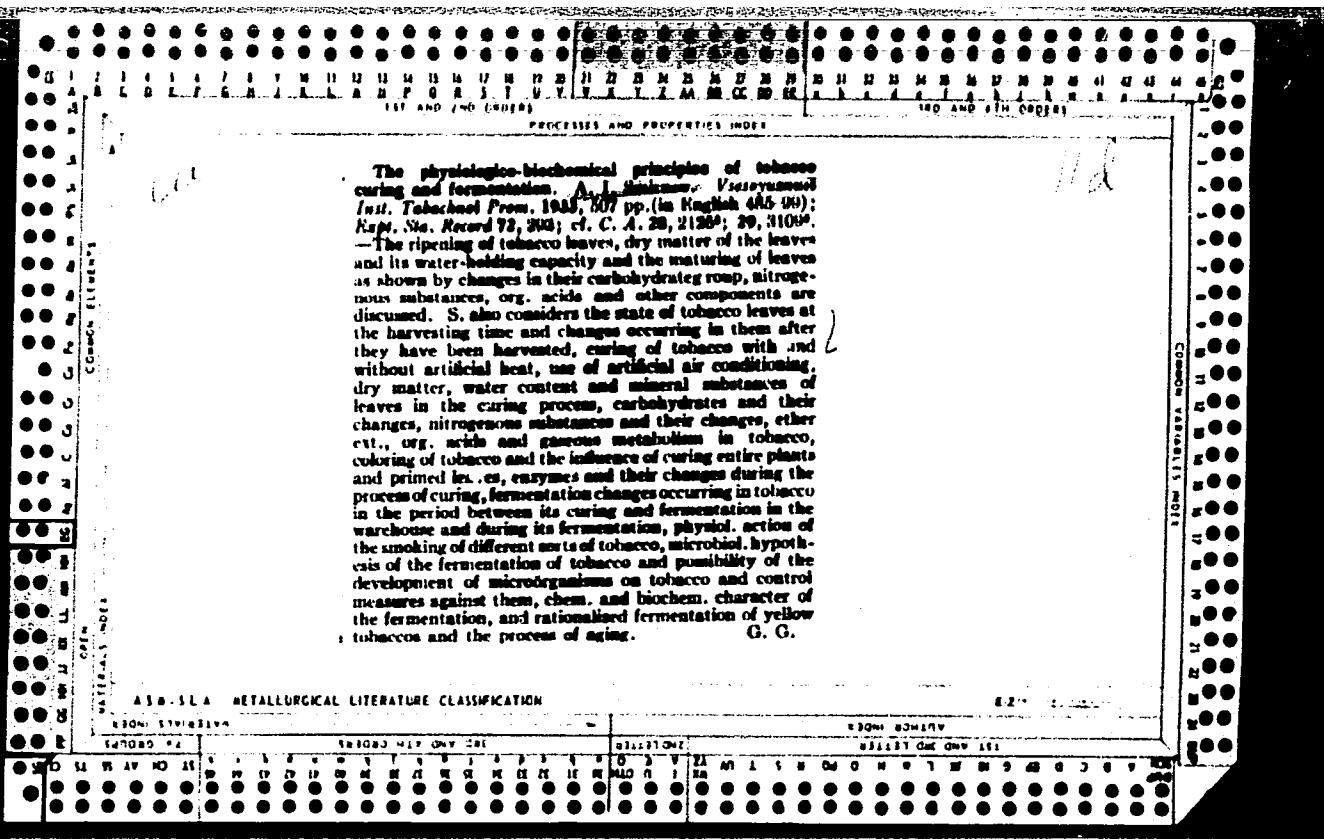


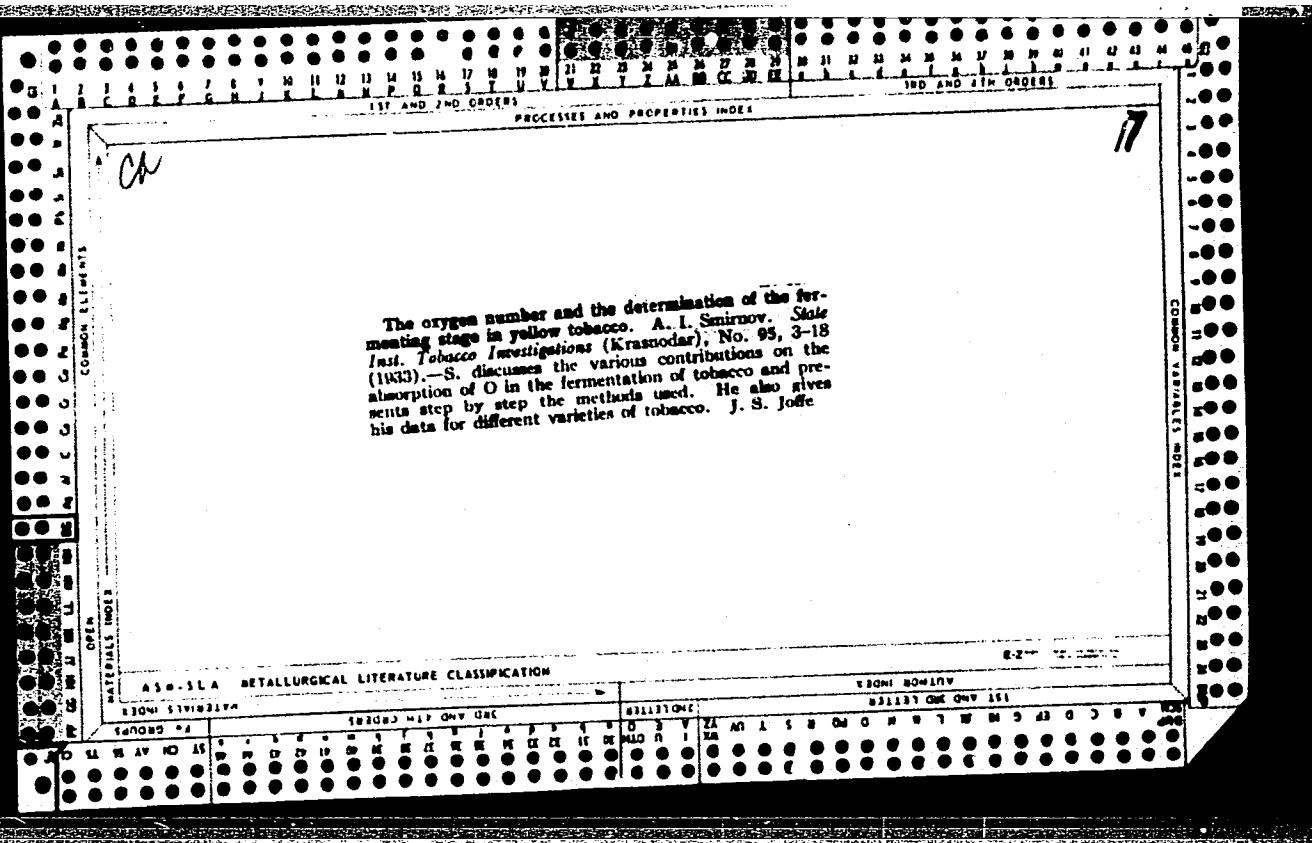


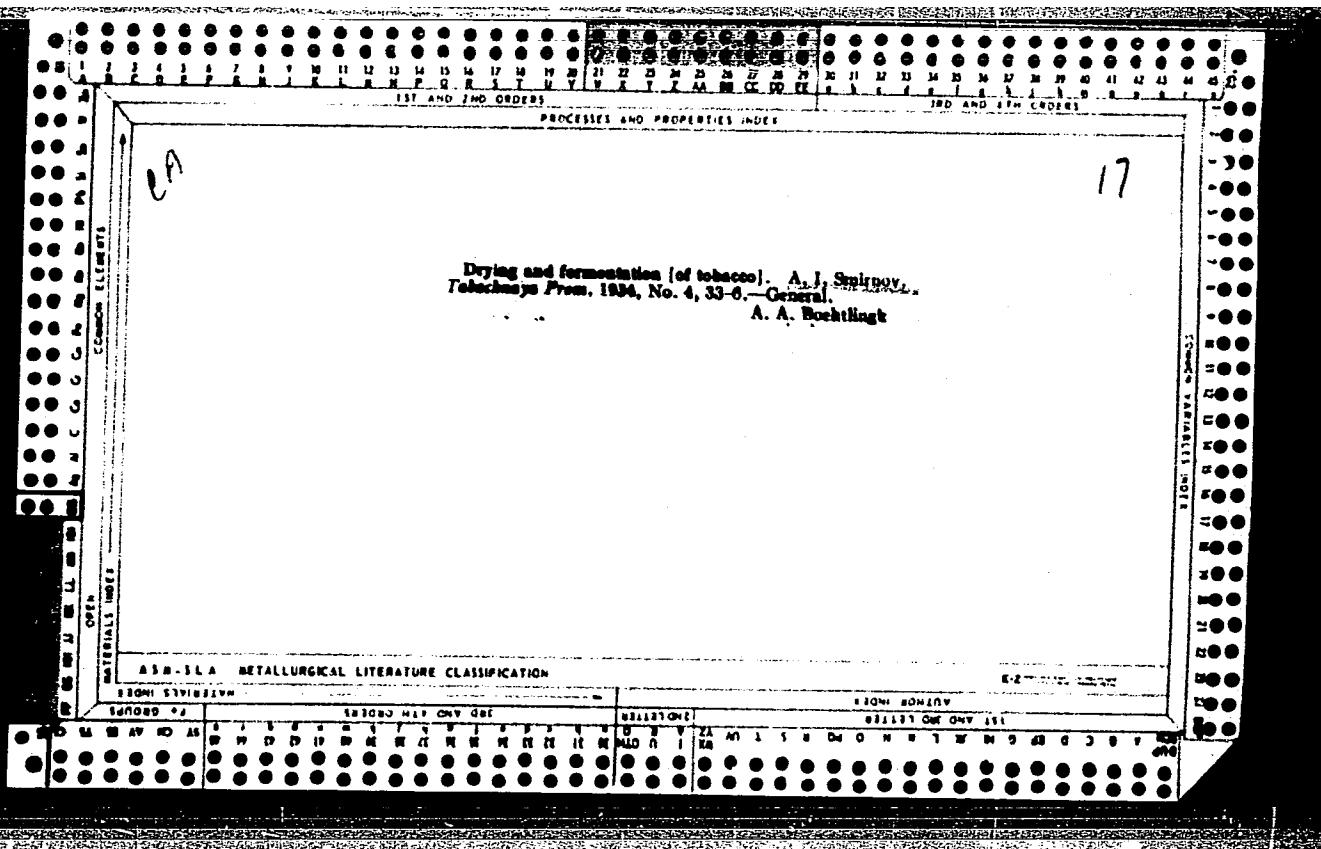


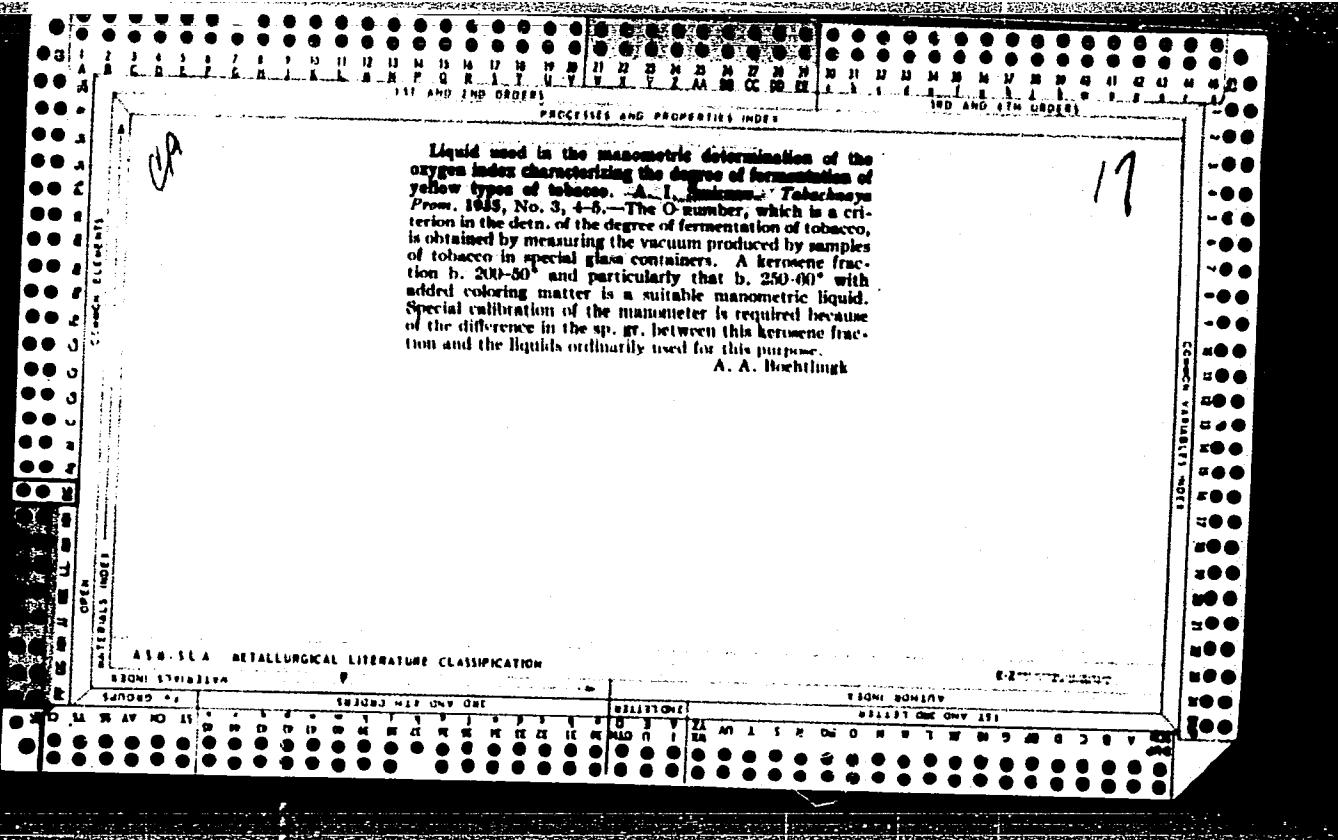


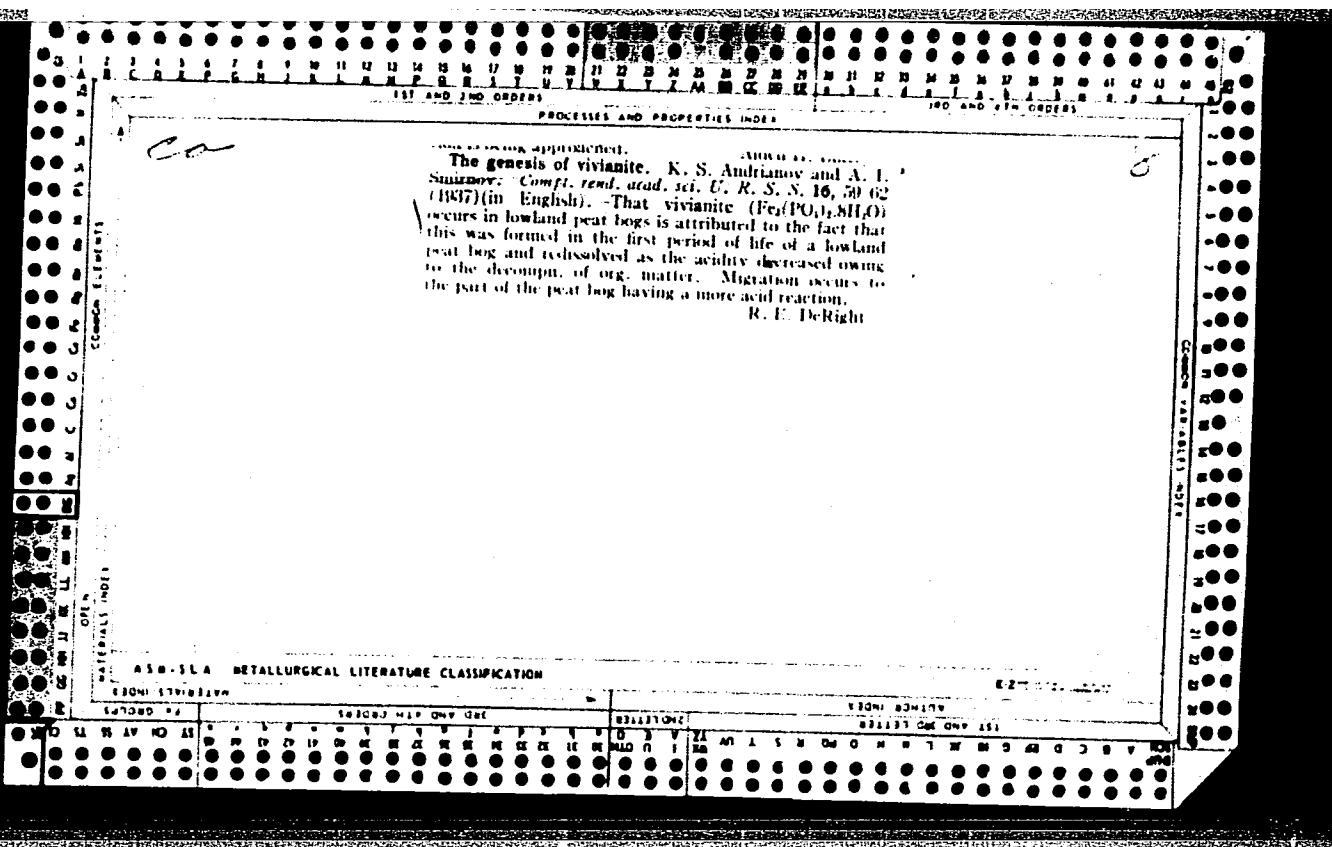










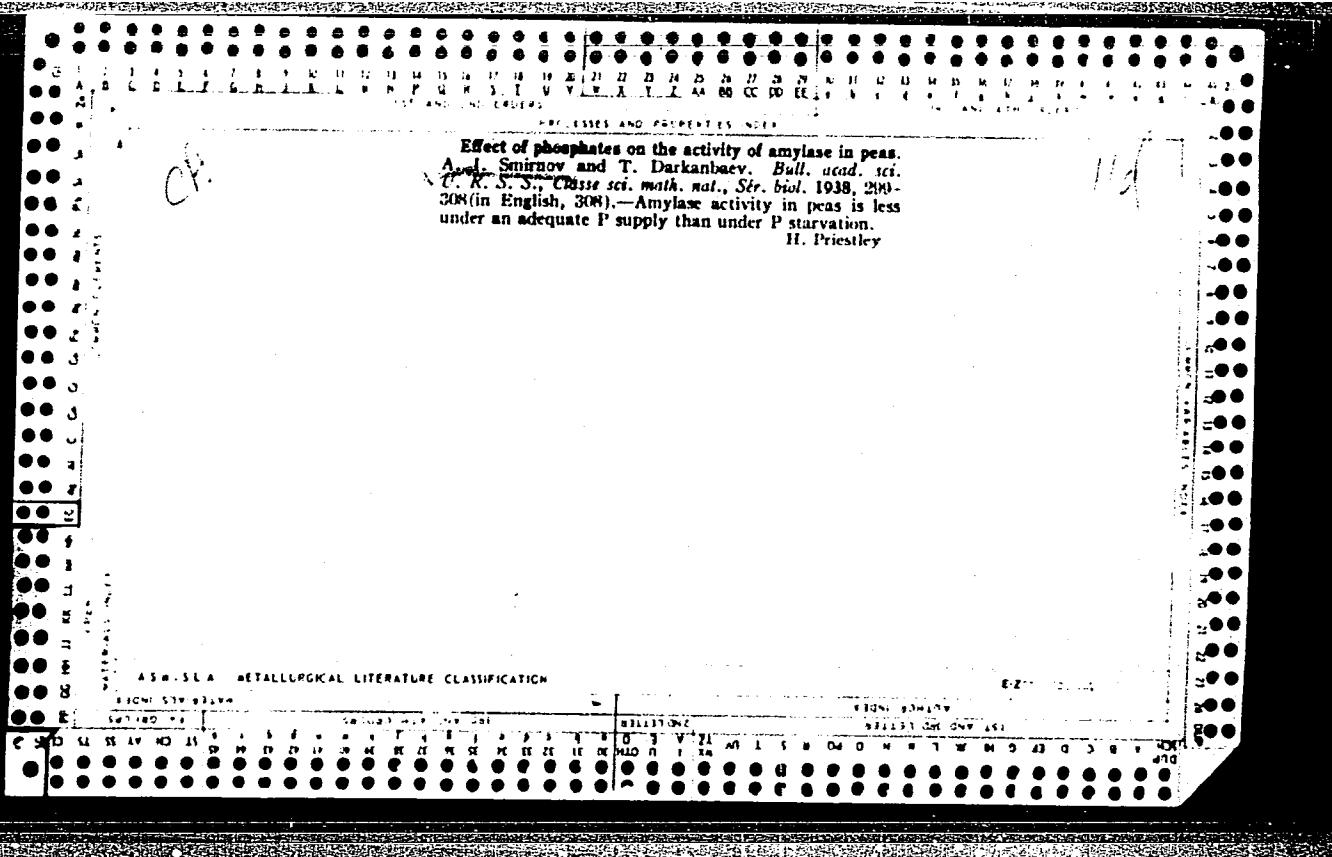


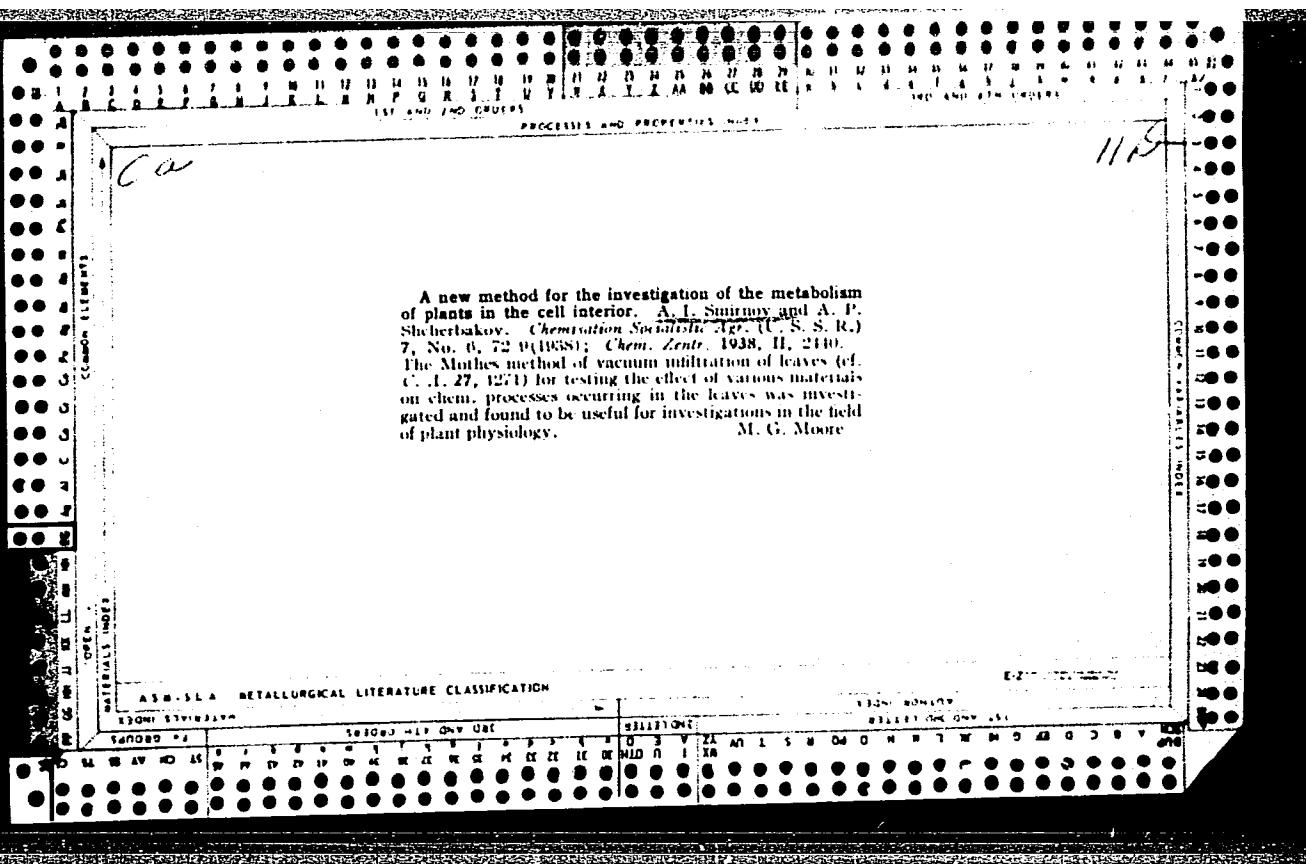
SMIRNOV, A.

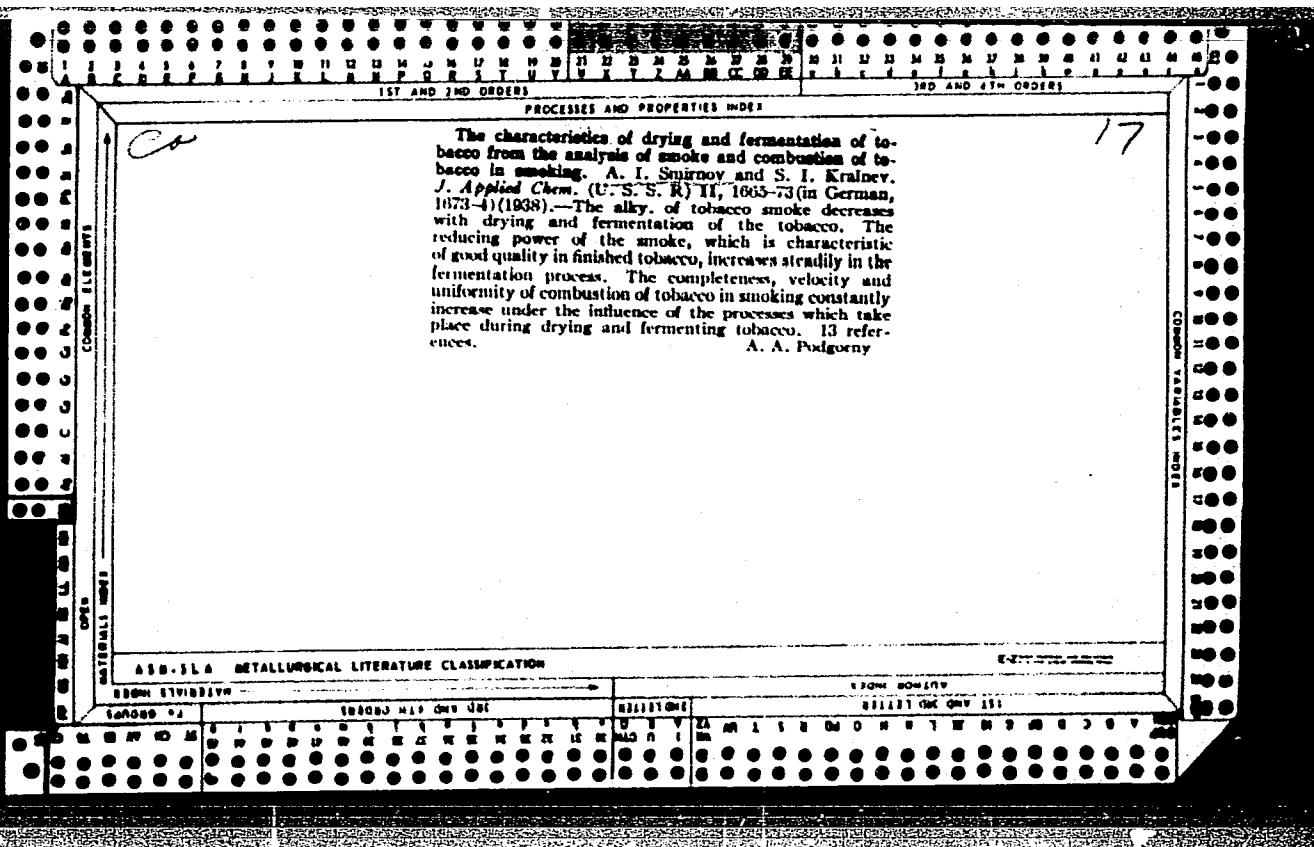
Variations of carbohydrate and nitrogen metabolism in higher plants in relation to phosphates. A. Smirnov, E. Shtrom and S. Kuznetsov. *Bull. acad. sci. U.R.S.S., Classe sci. math. nat., Ser. biol.* 1938, 265-90 (in English, 290-8).—Under conditions of P starvation, an intensified expenditure of dry substance and carbohydrates was observed in etiolated pea seedlings. The ratio of protein N to amino N in the vegetative organs decreased, when a P-deficient medium was used. The N content of plants on an adequate P supply was lower than in plants suffering from a P deficiency. H. Priestley

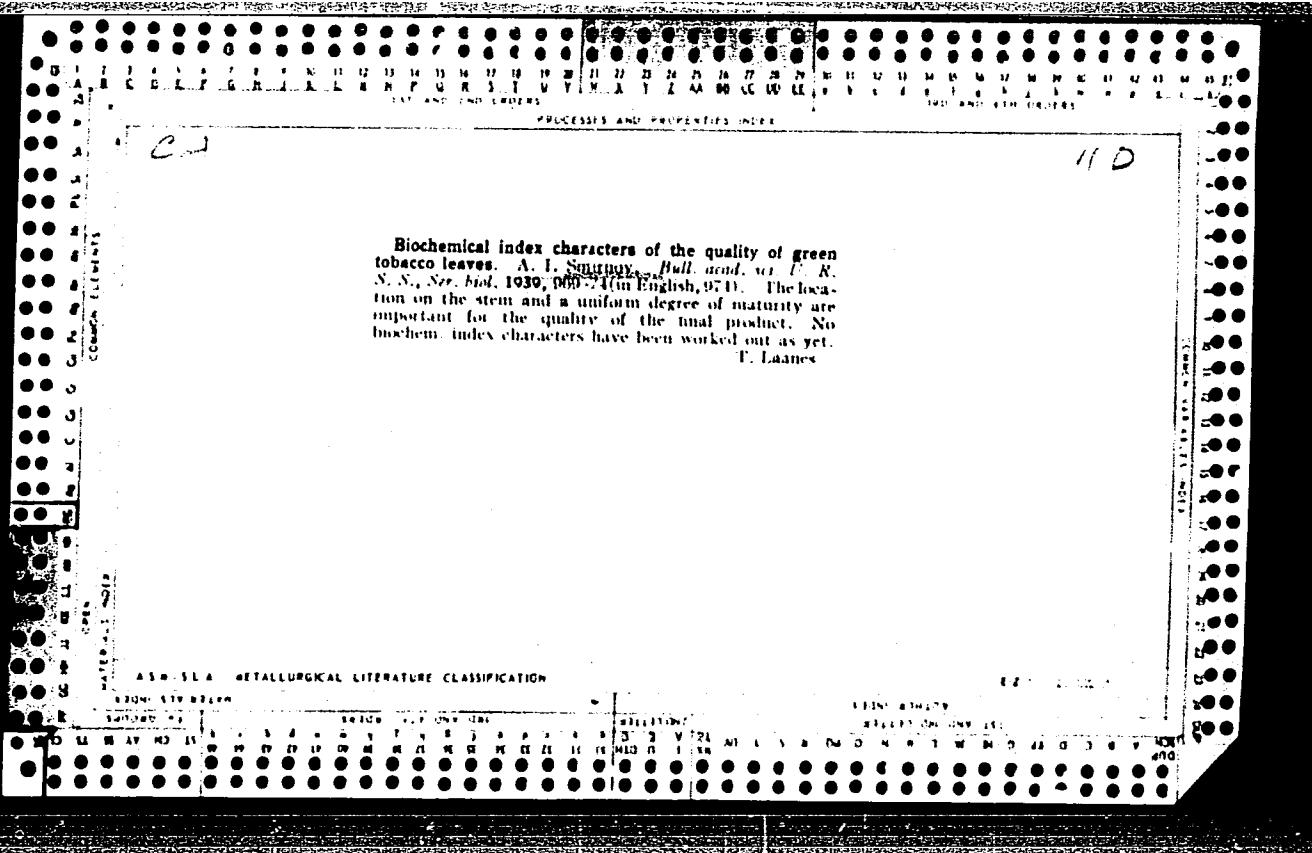
## ANNEX A. BIBLIOGRAPHICAL LITERATURE CLASSIFICATION

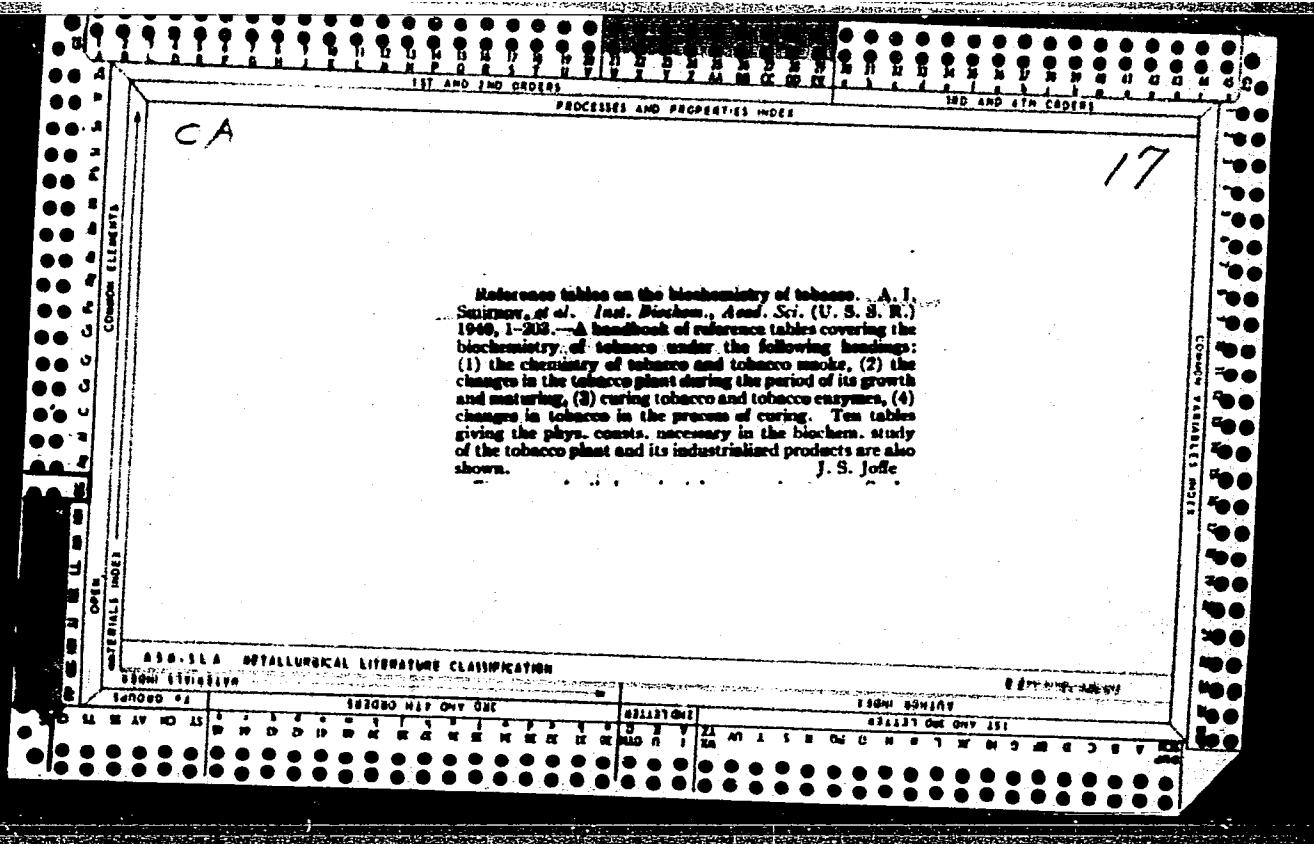
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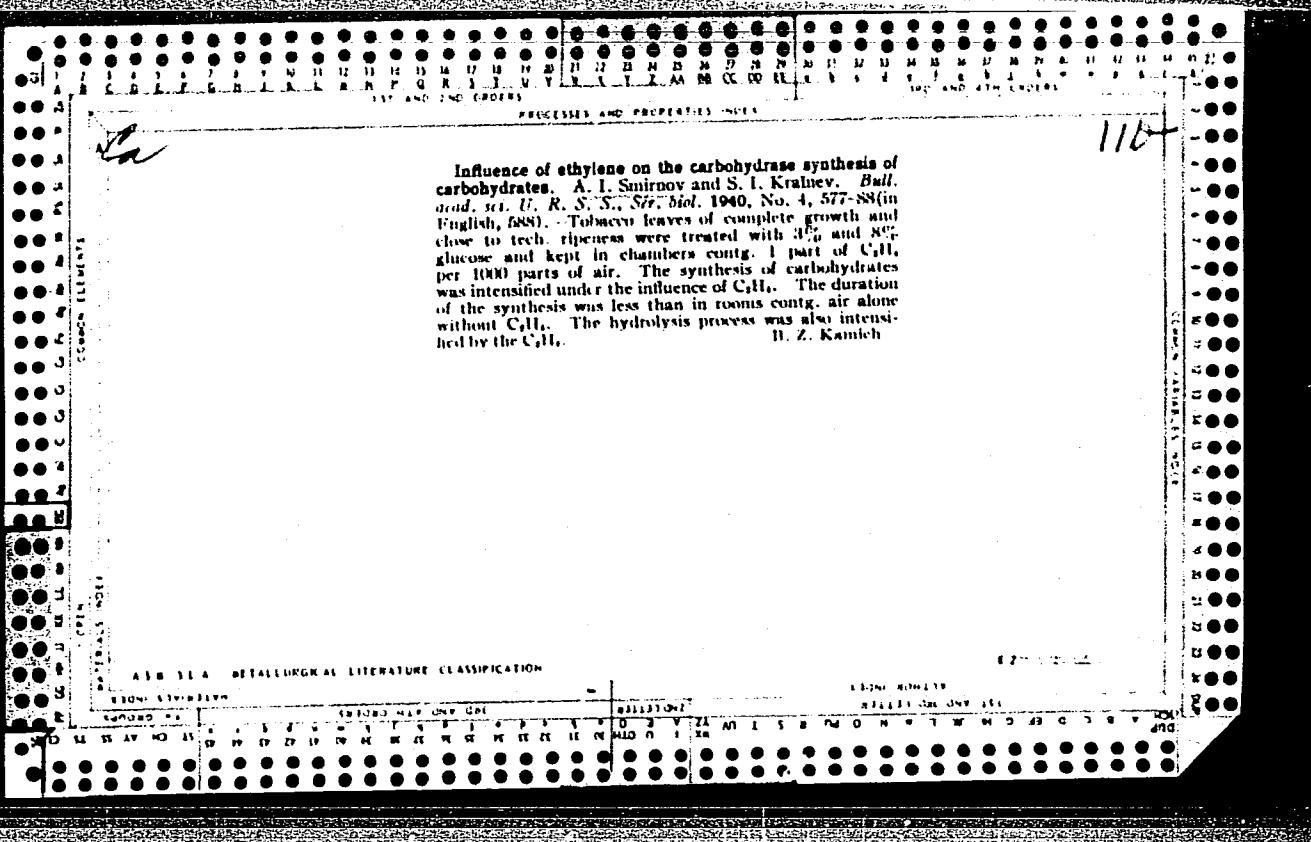


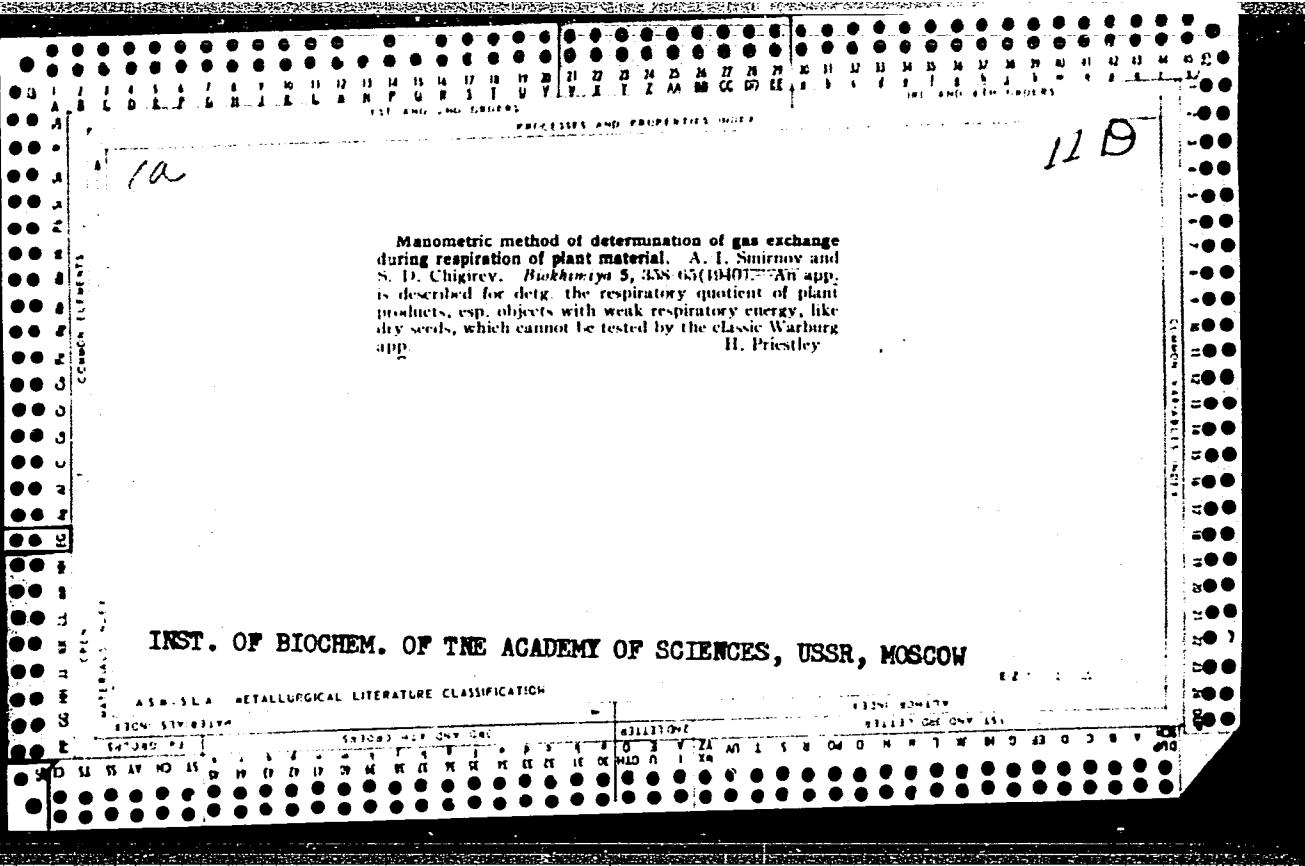








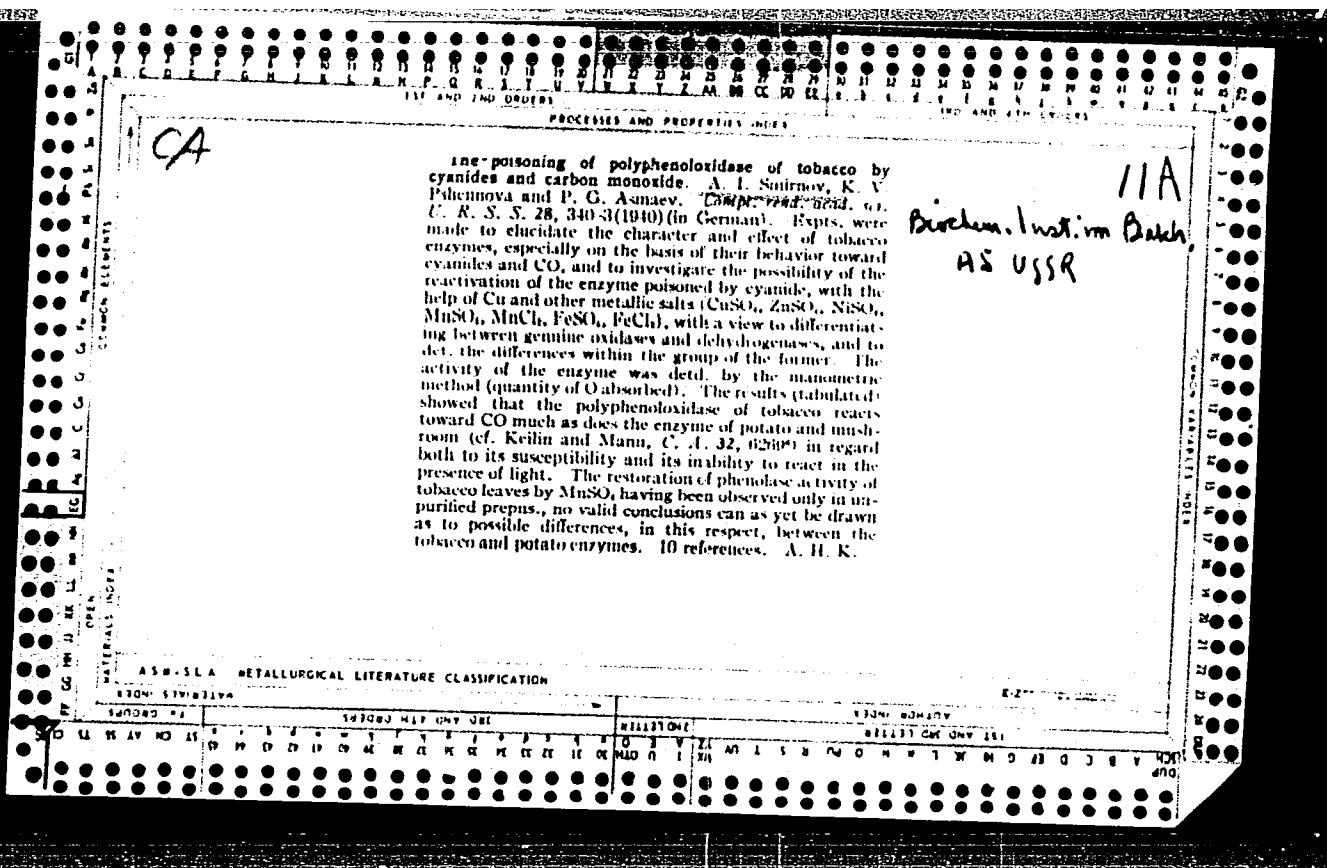




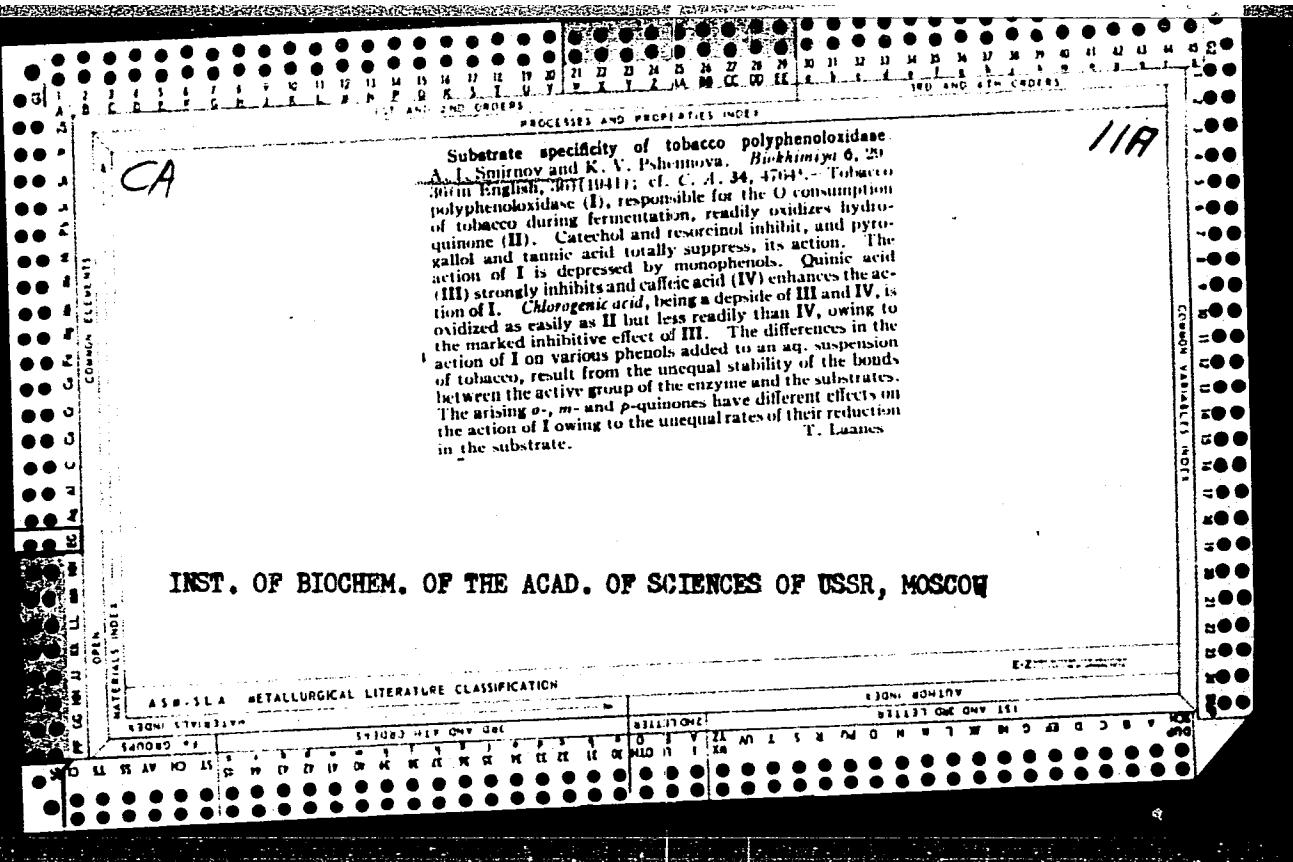
SMIRNOV, A. I.

"The Biochemistry of Grain in Storage" A. I. Smirnov, and V. L. Kretovich,  
Sbornik Akad Nauk SSSR, Presidentu Adad Nauk SSSR Komarovu 1939, pp 720-5;  
Khim Referat Zhur, 1940, No 12, pp 31 (SEE: Inst. Insect/Fungi. in Ya. V.  
Samoylov)

SO: U-237/49, 8 April 1949





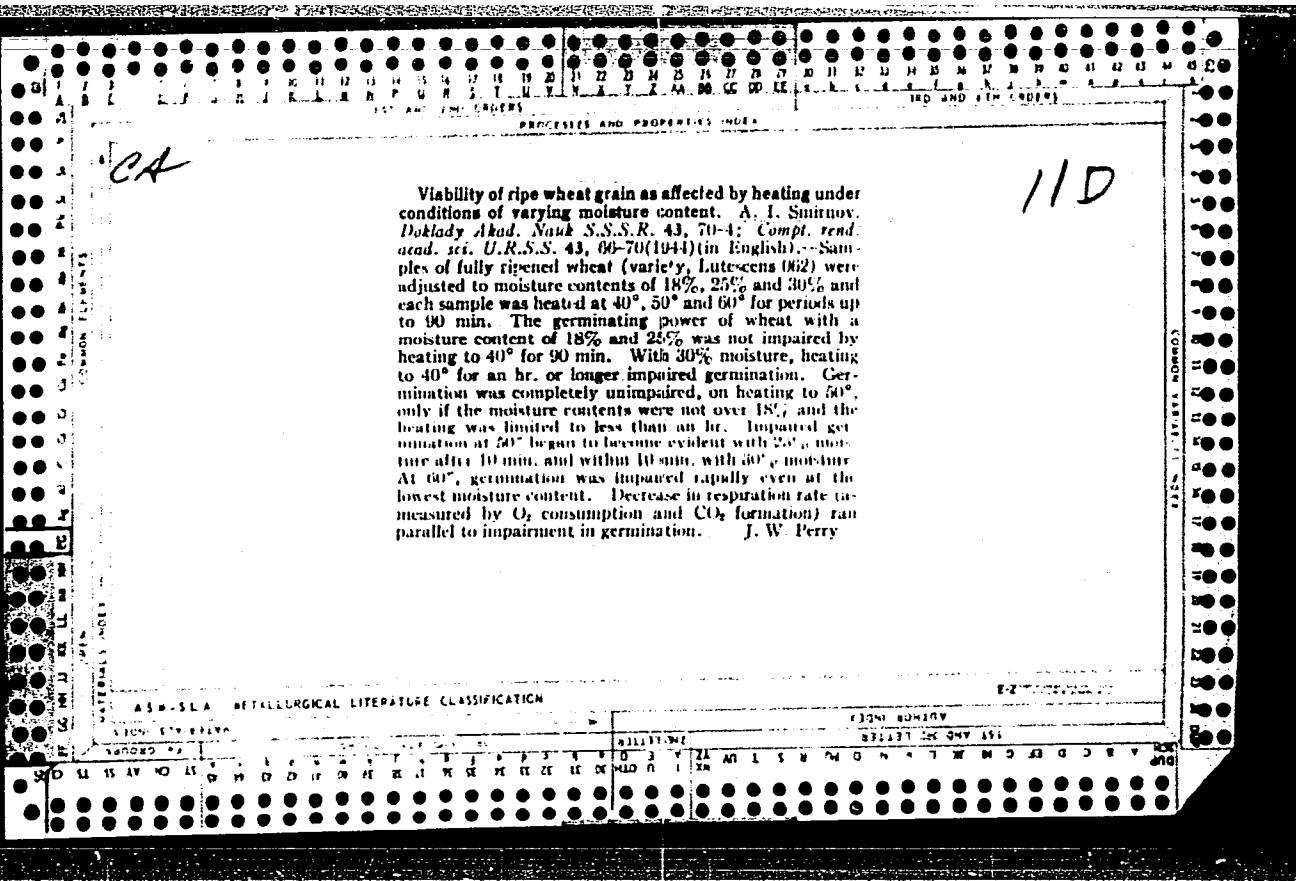


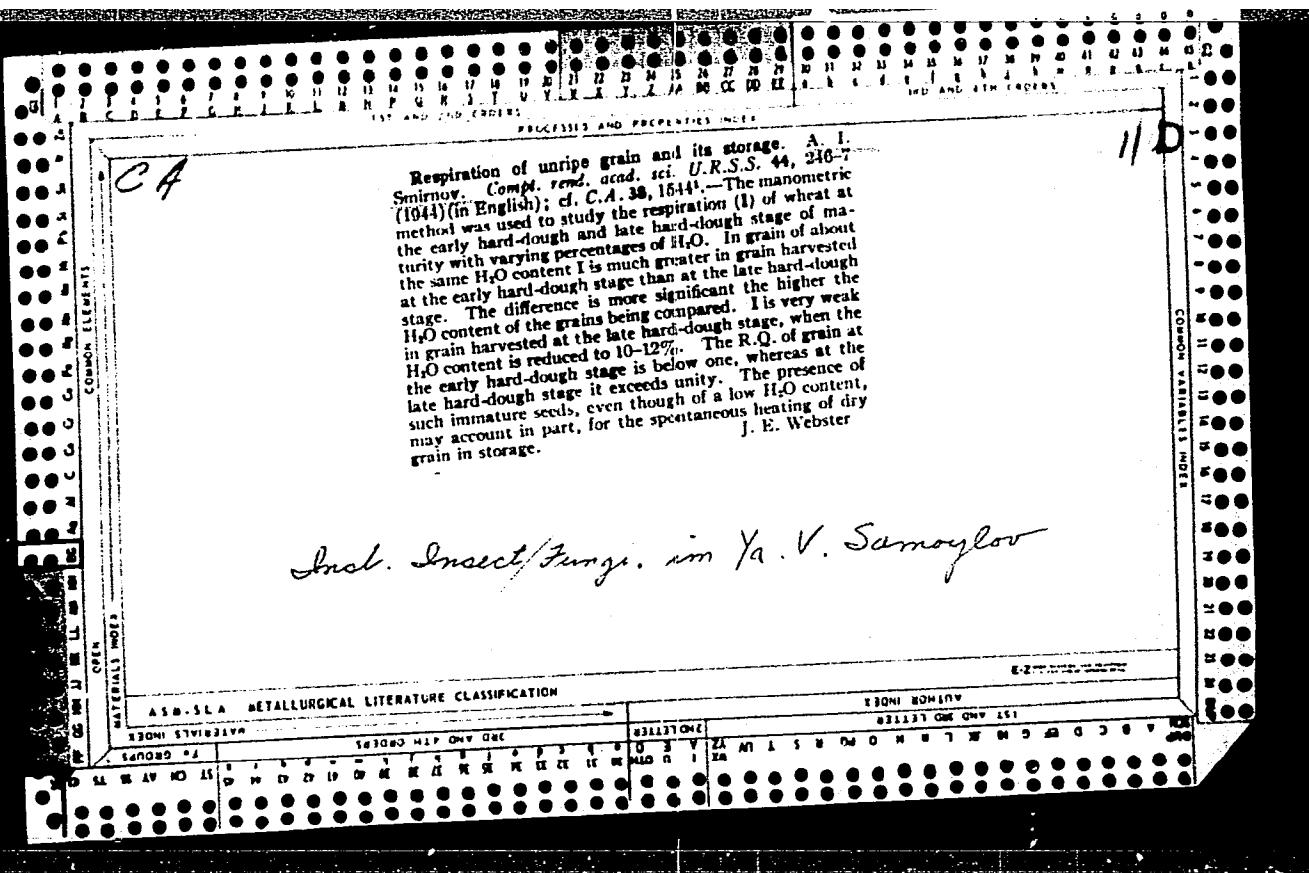
SMIRNOV, A. I.

"The Respiratory Metabolism and Enzymic Activity of the Wheat Kernel during Ripening," A. I. Smirnov, Z. S. Bronoviytskaya, K. V. Pshennova, S. D. Chigirev, and E. N. Ushakova, Biokhimiya 8, pp 149-57 (1943)  
(SEE: Inst. Insect/Fungi. in Ya. V. Samoylov)

SO: U-237/49, 8 April 1949

INSTITUTE OF BIOCHEMISTRY OF THE ACADEMY OF SCIENCES OF THE USSR





DATA SHEET AND EXTRACTS

5/

**Adhesive from spindle-tree bark.** A. Vomyskil, A. Smirnova, and A. Smirnova. *Mysoreya i Mlechchnaya Prom.* 1945, No. 1, 20-31. Bark of spindle tree consists mainly of gutta-percha, cellulose, and carbohydrate-protein-resin moiety. On boiling, the last group dissolves in alk. solns., and produces a glue-like substance after concn. Lime is the only suitable alkali for boiling out the adhesive-forming component, the optimum concn. being 1% soln. for 30-45 min. The yield of adhesive is 30-50% of bark wt. The adhesive has d. 1.31-1.32; pH, after treatment with  $\text{Na}_2\text{CO}_3$ , 4-4.5. It belongs to the cold adhesive type and has a rupture strength of 3.8 g./cm.<sup>2</sup>, which is increased to 8.2 by addn. of 20% bone adhesive. It appears to be particularly useful for a paper adhesive. Its av. compn is: proteins 33.4, resin 19.8, dextrans 14.0, reducing carbohydrates 1.7, high-polymer carbohydrates 0.8, fats 0.66, and minerals 20%.

G. M. Kosolapoff

## ASH-SEA - METALLURGICAL LITERATURE CLASSIFICATION

SMIRNOV, A. I.

Agriculture & Plant & Animal Industry.

Climate of the Saratov Province and crop yields.  
Saratovskoe obl. gos. izd-vo, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1952 ~~X953~~, Uncl.

SHIRNOV, A. I.

The Ministry of Agriculture of the USSR, in the name of the Minister of Agriculture and the Central Committee of the Communist Party of the Soviet Union, announces that the following scientific works, popular science books, and textbooks have been submitted for competition for Stalin Prizes for 1950 (Moscow, April 1950). (See also, No. 31, p. 3 Apr. 1950).

<u>Name</u>	<u>Title of work</u>	<u>Published by</u>
Smirnov, A. I.	"Plant Cultivation" (text-book, 5th edition)	Saratov Agricultural Institute

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651510016-5

SMIRNOV, Aleksandr Ivanovich, 1907-

Plant growing 5., perer. i dop. izd. Moskva, Gos. izd-vo selkhoz lit-ry, 1952. 608 p.  
(Uchebniki i uchebnye posobiia dlia sel'skokhoziaistvennykh tekhnikumov)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651510016-5"

SMIRNOV, A. I., TROFIMOV, M. M.

Volga Valley - Irrigation Farming

Stubble crops on irrigated farms in the Trans-Volg. Sov. agron. 10, No. 8, 1952

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

SHIRNOV, A. I.

u/s  
726.43  
.S64

Fiziologo-biokhimicheskiye osnovy obrabotki tabachnogo syr'ya (Physiological and biochemical principles of processing tobacco) Pod red. P. G. Asmayeva. Moskva, Pishchepromizdat, 1954.

459 p. tables.

Bibliographical footnotes.

SMIRNOV, A.I., professor.

Wheat in Canada. Semidwarf 5 no. 1000 Ag '57. (MLRA 10:9)  
(Canada--heat)

USSR/Cultivated Plants. Potatoes, Vegetables, Melons.

M

Abs Jour: Ref Zhur-Diol., No 17, 1958, 77664.

Author : Smirnov, A.I.

Inst :

Title : Potato Growing in Canada.

Orig Pub: Kartofel', 1957, No 6, 54-57.

Abstract: In Canada, the area under potatoes consists of 0.6% of the total planted area of the country. The harvest throughout the country comprises on the average 138.8 c/ha. A leading place belongs to the varieties Sebago, Katahdin, Irish, Kobbler and others. The potato is cultivated in crop rotation with perennial grasses, using organic and mineral fertilizers. Seeded potato sections are planted with pure-variety, healthy planting material of the first class. Seed

Card : 1/3

60

USSR/Cultivated Plants - Grains.

H-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39239

Author : Smirnov, A.I.

Inst :

Title : Corn in Canada.

Orig Pub : Kukuruza, 1957, No 6, 54-62.

Abstract : No abstract.

Card 1/1

USSR/Cultivated Plants. Cereals.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77604.

Author : Smirnov, A.I.

Inst :

Title : New Varieties of Wheat, Oats and Barley in Canada.

Orig Pub: Vestn. s.-kh. nauki, 1957, No 7, 140-144.

Abstract: History of the breeding of the Selkirk spring wheat variety which is resistant to different types of rust and is widespread in the provinces of Manitoba, Saskatchewan and Alberta, possesses high harvest yields and increased baking qualities; of the Chinuk and Reskyu varieties which are resistant to infections of stem sawfly (*Cephus cinctus*); of the Ramsey variety of hard wheat

Card : 1/2

SMIRNOV, Aleksandr Ivanovich, prof.; SEMENOVSKIY, A.A., red.; BALLOD, A.I.,  
tekhn. red.

[Agriculture in Canada] Sel'skoe khoziaistvo Kanady. Moskva, Gos.  
izd-vo sel'khoz. lit-ry, 1958. 294 p. (MIRA 11:7)  
(Canada--Agriculture)

SMIRNOV, A.I., prof.

Sweet clover in Canada. Zemledelie 7 no.6:92-95 Je '59.  
(MIRA 12:8)

(Canada--Sweet clover)

SMIRNOV, A.I.; RAYEVSKIY, V.S.; BELYAVSKAYA, Ye.A.; KOVALEVA, T.N.

Effect of the resistance to respiration on the functional state  
of the respiration center in dogs in a chronic experiment. Biul.  
eksp. biol. i med. 60 no.8:14-17 Ag '65. (MIRA 18:9)

1. Fiziologicheskaya gruppa (nauchnyy rukovoditel' - chlen-  
korrespondent AMN SSSR prof. A.I. Smirnov) AMN SSSR, Moskva.

PEREGRUDOV, V.V., kapitan 2-go ranga; SMIRNOV, A.I., kapitan 2-go ranga

The "Polaris" ballistic rocket. Mor. sbor. 46 no.10:81-86  
0 '63. (MIRA 18:12)

MELEN'TYEV, L.P.

MELEN'TYEV, L.P., kandidat tekhnicheskikh nauk; SMIRNOV, A.I., kandidat  
tekhnicheskikh nauk.

Rail deformation on factory railroads carrying hot loads, Vest.  
TSNII MPS 15 no.2:49-51 S '56.  
(Railroads--Rails) (MIRA 9:12)

AL'BREKHT, V.G., doktor tekhn.nauk, prof.; SMIRNOV, A.I., kand.tekhn. nauk;  
PETROVA, V.N., inzh.

Characteristics of the operation and design of open-pit  
tracks on yielding beds. Vest. TSNII MPS 17 [i.e. 19] no.7:21-25  
'60. (MIhA 13:11)

(Mine railroads--Tracks)

SKORODUMOV, Georgiy Yevgen'yevich, kand. tekhn. nauk; SMIRNOV, Aleksey Io-  
novich, kand. tekhn. nauk; SMIRNOV, Mikhail Petrovich, kand. tekhn.  
nauk; OSIROV, M.I., inzh., retsenzent [deceased]; TSUKANOV, P.P.,  
kand.tekhn.nauk, red.; BOBROV, Ye.N., tekhn. red.

[Narrow gauge (750 mm.) track design, maintenance, and repair] Ustroj-  
stvo i soderzhanie zheleznodorozhnogo puti uskoi kolei (750 mm). Mo-  
skva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniya,  
1961. 262 p. (MIRA 14:12)

(Railroads, Narrow-gauge—Track)

SMIRNOV, A.I., kand.tekhn.nauk; SKVORTSOV, O.S., inzh.; KISELEV, V.V.

Use of long-length rails on the railways of the Shatura peat transportation. Tof. prom. 38 no. 3:18-21 '61. (MIRA 14:4)

1. Vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva putey soobshcheniya (for Skvortsov). 2. Shaturskoye transportnoye upravleniye (for Kiselev).  
(Shatura—Peat industry)

AL'BREKT, V.G., doktor tekhn.nauk; SMIRNOV, A.I., kand.tekhn.nauk

Efficient type of rails for industrial railroads. Zhel.dor.  
transp. 43 no.5:68-71 My '61. (MIRA 14:4)  
(Railroads, Industrial--Rails)

AL'BREKHT, Vladimir Georgiyevich, doktor tekhn.nauk, prof.; SMIRNOV,  
Aleksey Ionovich, kand.tekhn.nauk; PETROVA, Vera Nikolayevna,  
inzh. Prinimali uchastiye: VINOGRADOVA, Ye.I, inzh.;  
SKVORTSOV, O.S., inzh.; CHUPRIKOV, S.A., inzh. BYKHOVSKAYA,  
S.N., red.izd-va; MAKSIMOVA, V.V., tekhn.red.

[Selecting the types of superstructure for railroad tracks  
in open pit mines] Vybor tipov verkhnego stroeniia zhelezno-  
dorozhnykh putei v kar'erasakh. By V.G.Al'brekht, A.I.Smirnov,  
V.N.Petrova. Pod obshchei red. A.I.Smirnova. Moskva, Gos-  
gortekhizdat, 1962. 198 p. (MIRA 15:5)  
(Mine railroads)

STUKALKIN, Andrey Nikolayevich; SMIRNOV, Aleksandr Ivanovich; SIDOROV,  
N.I., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Pantographs for electric locomotives] Pantografy elektriche-  
skikh lokomotivov. Moskva, Transzheldorizdat, 1962. 77 p.  
(MIRA 15:9)  
(Electric locomotives)

SMIRNOV, A.I., kand.tekhn.nauk; SKVORTSOV, O.S., inzh.

Action exerted by a narrow-gauge diesel locomotive on the track.  
Put' i put.khoz. 6 no.5 19748 '62. (MIA 15:4)  
(Diesel locomotives) (Railroads, Narrow-gauge)

KUVALDEN, Boris Ivanovich, kand. tekhn. nauk; SMIRNOV, A.I.,  
red.; MYAKUSHKO, V.P., red.izd-va; SHIBKOVA, R.Ye.,  
tekhn. red.

[Using welded long-length rails in narrow-gauge logging  
railroads] Primenenie svarynykh dlinnomernykh rel'sov na  
lesovoznykh uzkokoleinykh zheleznykh dorogakh. Moskva,  
Goslesbumizdat, 1963. 112 p. (MIRA 17:4)

SMIRNOV, A.I., kand.tekhn.nauk

Narrow-gauge track; efficient types of substructures. Put' i put.  
khoz. 7 no.2:20-22 '63. (MIRA 16:2)  
(Railroads, Narrow gauge—Track)

SMIRNOV, A.I., kand. tekhn. nauk

Efficiency of the use of reinforced concrete ties on narrow-gauge railroads. Vest. TSNII MPS 22 no.7:57-59 '63.

(MIRA 16:12)

SMIRNOV, Aleksandr Ivanovich; STUKALKIN, Andrey Nikolayevich;  
PETUSHKOVA, I.K., red.

[Resistances in the electrical circuits of electric locomotives] Soprotivleniya v elektricheskikh tsepiakh elektrovozov. Moskva, Transport, 1965. 73 p. (MIRA 18:3)

SHIBAEV, A. I. Prof

"Asynchronous Activity of the Ventricles of the Heart of a Dog Due to Blocking of the Right Node of the Bundle of His," Moscow, -c1948-.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651510016-5

SHIRNOV, Prof. A. I.

"Functional Systolic Murmur of the Heart in Experiments," Byul. Eksper. Biol. i Med., No. 3, 1948. "I. P. Pavlov's Works on the Physiology of Blood Circulation and their Importance in Medicine," Moscow, 1951-52.

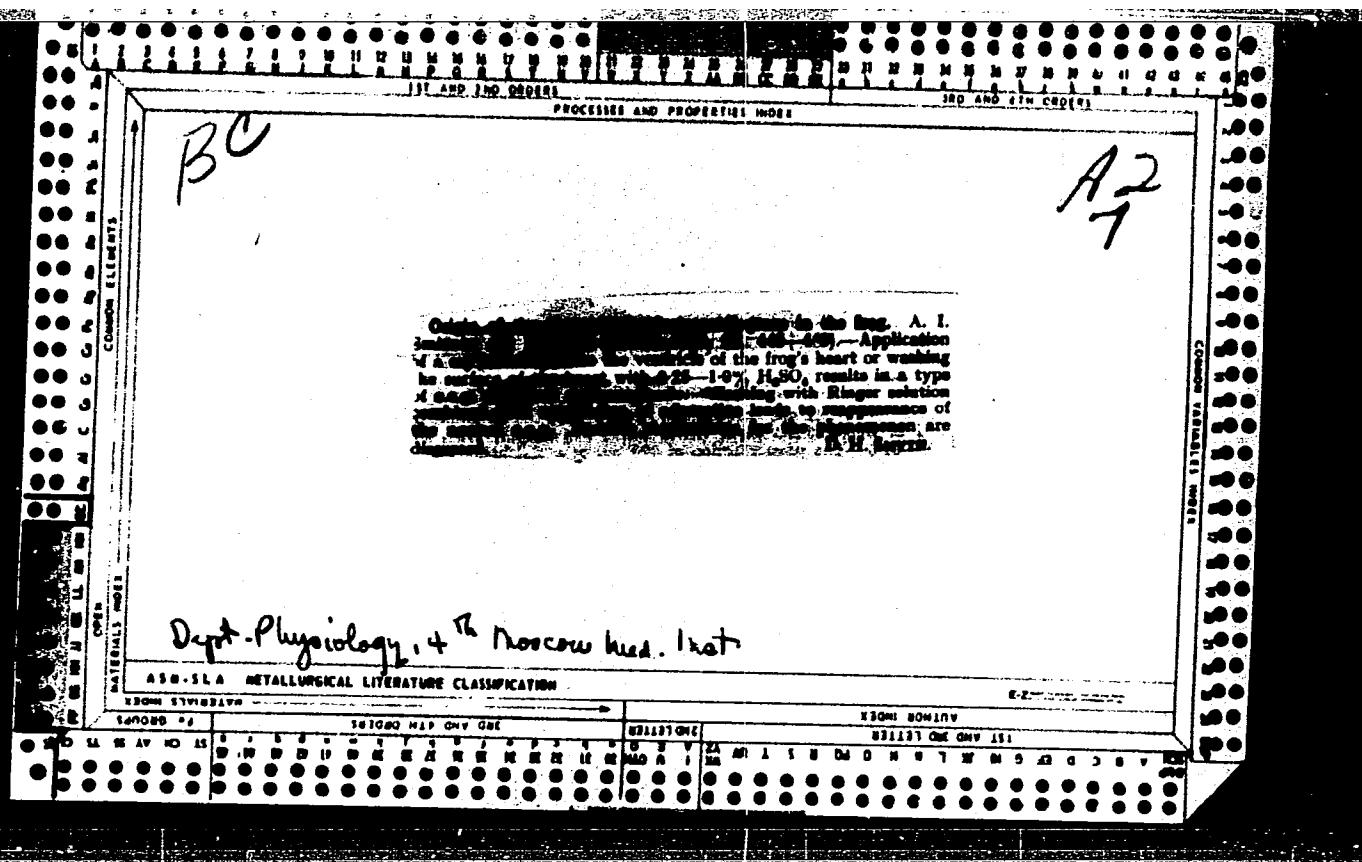
APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651510016-5"

SMIRNOV, A.I.

25274 SMIRNOV, A.I. Kvoprosy O Tromboze Sosudov Posle Splenektomii.  
Sbornik Trudov Gospit. Kliniki (Pervyy Mosk. Med. In-T). M. 1949, S.  
336-47 Surat, V.S.O. Nevrologicheskikh Izemeneniyakh Pri Prefrontal'noy  
Lobotomii-Sm. 25314

SO: Letopis' No. 33, 1949



SMIRNOV, A.I.

Pavlov's theory or the functional correlation between the cerebral cortex and subcortical neural centers. Sovet.med. no.5:12-17 May 1951.  
(CML 20:9)

1. Professor. 2. Of the Main Military Hospital of the Armed Forces USSR imeni Academician N.N. Burdenko.

SMIRNOV, A. I.

Pavlovian theory on functional correlation between the cerebral cortex and subcortical centers. Ter. arkh., Moskva 23 no.5:73-74 Sept-Oct 1951. (CIML 21:1)

1. Professor, Corresponding Member of the Academy of Medical Sciences USSR.

S米尔诺夫, A. I.

Studies of I. P. Pavlov in the physiology of blood circulation and their importance to medicine Moskva, Znanie, 1952. 23 p. (52-42217)

QP26.P3535

LEPESHINSKAYA, O.B., professor; USIYEVICH, M.A., professor; ASRATYAN, E.A., professor; SMIRNOV, A.I., professor; FILIPPOVICH, S.I., doktor meditsinskikh nauk; VOLOKHOV, A.A., professor; FILIMONOV, I.N., professor; SNYAKIN, P.G., professor; CHERNIGOVSKIY, V.N., professor; SPERANSKIY, A.D., akademik; DOLIN, A.O., doktor meditsinskikh nauk; KOTLYAREVSKIY, L.I., professor; NEGOVSKIY, V.A., professor; KASATKIN, N.I., professor; STEL'CHUK, I.V., professor; YEGOROV, B.G., professor; BAKULEV, A.N., professor; SMIRNOV, L.I., professor; USPENSKIY, V.N., redaktor; PETROV, S.P., redaktor.

[Teachings of I.P.Pavlov in theoretical and practical medicine]  
Uchenie I.P.Pavlova v teoreticheskoi i prakticheskoi meditsine. Vol.2.  
Moskva, Izd-vo Ministerstvo zdravookhraneniia SSSR, 1953. 611 p.

(MLRA 7:3)

1. Deystvitel'nyy chlen AMN SSSR (for Lepeshinskaya, Chernigovskiy and Bakulev).
2. Chlen-korrespondent Akademii nauk SSSR (for Asratyan).
3. Chlen-korrespondent AMN SSSR (for Smirnov, Filimonov, Yegorov and L.I.Smirnov).
4. Moscow. TSentral'nyy institut usovershenstvovaniya vrachey. (Pavlov, Ivan Petrovich, 1849-1936) (Nervous system) (Physiology)

SMIRNOV, A.I., chlen-korrespondent AMN SSSR; SHUMILINA, A.I., kandidat  
meditsinskikh nauk

Experimental infarct of the cardiac ventricles. Klin.med. 33 no.2:  
62-77 F '54.  
(MLRA 8:5)

1. Iz laboratorii fiziologii i farmakologii serdechno-sosudistoy  
sistemy (zav. prof. A.I.Smirnov) Instituta farmakologii, khimio-  
terapii i khimioprofilaktiki AMN SSSR.  
(MYOCARDIAL INFARCT, experimental,  
ventric)

SHIRNOV, A.I.

EXCERPTA MEDICA Sec.2 Vol.9/12 Physiology, etc. Dec 56

5546. SMIRNOV A.I. and ŠUMILINA A.I. \* Experimental infarction of the ventricular myocardium (Russian text) KLIN. MED. (Mosk.) 1955, 33/2 (62-77)

Not only the coronary blood supply but also the activity of the myocardium is of essential importance. On the basis of Pavlov's teachings it is pointed out that the intracardiac nerves are of great importance in connection with infarction. In the

experimental work described here it is shown that the vagus nerve is the most important for excitation threshold and force of the heart. A detailed account is given of ECG observations on the dog, which confirm Pavlov's view. Experiments on the dog heart rendered ischaemic by occlusion of the descending branch of the left coronary artery, in some instances with occlusion of the vein as well, are described. The extent of the collateral supply, which varies individually, was shown to be of decisive importance. The importance of the vagus in myocardial infarct production was repeatedly demonstrated. In connection with human pathology it is concluded that atropine is always indicated as soon as vagal hyperexcitability appears.

Inst. Pharmacology & Therapy,  
AMS USSR

SMIRNOV, A.I.; TOLOVA, S.V.; UL'YANINSKIY, L.S.

Functional condition of the heart and the effect of the extracardiac nervous system in experimental myocardial infarction. Biul. eksp. biol. i med. 146 no.12:33-38 D '58. (MIRA 12:1)

1. Fiziologicheskaya gruppa pri AMN SSSR (Nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR, prof. A.I. Smirnov), Moskva.  
(MYOCARDIAL INFARCTION, exper.  
eff. of funct. cardiac cond. & extracardiae nerves in  
dogs (Rus))

SMIRNOV, A.I.; TOLOVA, S.V.; UL'YANINSKIY, L.S.

On the problem of the cardiac function and its reactions to the extra-cardiac nervous system in experimental myocardial infarction. Report.  
No.2: Effect of repeated increase of the tonus of the vagus nerve center on the course of experimental myocardial infarction. Biul.eksp. biol.i med. 47 no.8:28-33 Ag '59. (MIRA 12:11)

1. Iz fiziologicheskoy gruppy AMN SSSR (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.I. Smirnov), Moskva.  
(MYOCARDIAL INFRACT exper.)  
(VAGUS NERVE physiol.)

SMIRNOV, A.I. (Moskva)

Significance of the tone of the vagus nerve centers in the economic  
form of cardiac activity. Vest. AMN SSSR 16 no.12:65-73 '61.

(VAGUS NERVE) (HEART)

(MIR 15:2)

SMIRNOV, A.I.; TOLOVA, S.V.; KOVALEVA, T.N.

Dynamics of cardiac activity and of the P wave in the electrocardiogram during the excitation of the vagus nerve after disruption of inhibition. Biul. eksp. biol. i med. 52 no.11: 7-13 N '61.  
(MIRA 15:3)

1. Iz fiziologicheskoy gruppy AMN SSSR (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.I. Smirnov), Moskva.  
(ELECTROCARDIOGRAPHY) (VAGUS NERVE)

SMIRNOV, A.I.; TOLOVA, S.V.; KOVALEVA, T.N.

Functional state of the respiratory center and dynamics of  
respiratory arrhythmia during increased tonus of the vagus  
nerve center. Biul. eksp. biol. i med. 56 no.12:11-14 D '62.

(MIRA 17:11)

1. Fiziologicheskaya gruppa (nauchnyy rukovoditel' - chlen-  
korrespondent AMN SSSR prof. A.I. Smirnov) AMN SSSR, Moskva.